

The 2009 Iowa Health Fact Book

The University of Iowa

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Welcome to the 2009 Iowa Health Fact Book!

This book is the seventh in a series of Iowa Health Fact Book biennial publications and has been produced as a collaborative effort between The University of Iowa College of Public Health and the Iowa Department of Public Health. New to this edition is the section on Social Determinants of Health which is to coincide with the upcoming Healthy People 2020 release. Much of the information in the book is presented for each of Iowa's 99 counties and includes such knowledge as data on disease incidence and mortality, health and social behaviors, health resources, and environmental factors. With this book, we present a tool that is useful to Iowa's health care providers, health policy-makers, public health practitioners, and health researchers alike.

The previous Iowa Health Fact Books were distributed to registrants at the Governor's Conference on Public Health in either print or CD-ROM format. All previous editions are available for download via the College of Public Health Website. A limited number of printed copies of the 2009 edition will be available for those who prefer a bound book. Note that the pages of the book can be printed from the CD-ROM files or from PDF files on our website.

The format of the 2009 Fact Book follows closely to that of the past editions, allowing users the ability to track changes over time. As we continue this effort over the years, we are in a better position to track changes longitudinally. Like the previous editions, we present the data in a descriptive format, without analysis and interpretation of trends. The interested reader is free to use these data in his/her own analyses, and is encouraged to do so with care and attention paid to analytic issues such as small counts and possible changes in the way the data are collected. The data source is given for each type of information presented, and those responsible for collecting the data can address any questions you may have. You will also find a list of other health information resources and their contact information in the Appendix.

We are pleased to make this rich source of health information available to the public and hope that you find it useful.

Sincerely,

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Introduction

In the 2009 Iowa Health Fact Book, state-wide data relating to health outcomes, social determinants of health, health behaviors, and health care resources are presented, generally at the county level. The data have been compiled in this book, but were collected using different methodologies by various organizations and reporting mechanisms. We encourage readers who would like to use these data to learn about the data collection processes and data definitions from those responsible for collecting the information. The use of U.S. Census data to compute adjusted rates, sparse data concerns, data groupings, data definitions, and use of ranks are described in the Fact Book Conventions section of this Introduction.

The second section, Healthy Iowans 2010 Leading Indicators, outlines the major public health mortality concerns in Iowa and provides both baseline values and target values. Current levels have been included to show the progress toward those goals. Demographics are provided in the third section, listing county-specific population estimates in Iowa for the years 1999 – 2008. These population totals drive the calculation of crude and age-adjusted rates in later sections.

The remaining eleven sections provide valuable information on a variety of aspects of the health of Iowans. The Social Determinants of Health section is new to the Iowa Health Fact Book. Data from this section place emphasis on social and behavioral conditions affecting health. The Health Behaviors section tracks behaviors affecting our health, including the 2008 Iowa Youth Survey. The Prenatal and Infant Health section covers information regarding infants, but also the well-being of their mothers during pregnancy. The Infectious Diseases section focuses mainly on sexually transmitted diseases, although other infectious disease data are presented as well. The Cancer Incidence and Mortality section provides both crude and age-adjusted rates for selected major types of cancer. The Injury Mortality section reveals both crude and age-adjusted rates for certain causes of mortality, such as motor vehicle deaths and deaths caused by firearms. Closely related is the Youth Injury Mortality section, providing the same type of data but restricted to individuals aged less than 20. The last mortality section, Other Mortality, lays out crude and age-adjusted rates for mortality not caused by cancer or the causes listed in the previous two sections. A component of a good health care system is adequate capacity of both facilities and health care providers. The Health Care Providers chapter shows counts and crude rates of various types of providers across the state. The Health Care Facilities chapter details counts and crude rates for a variety of types of facilities. The final section of the book, entitled Environmental Health Indicators, focuses exclusively on the testing of blood lead poisoning of children in Iowa.

Fact Book Conventions

Layout

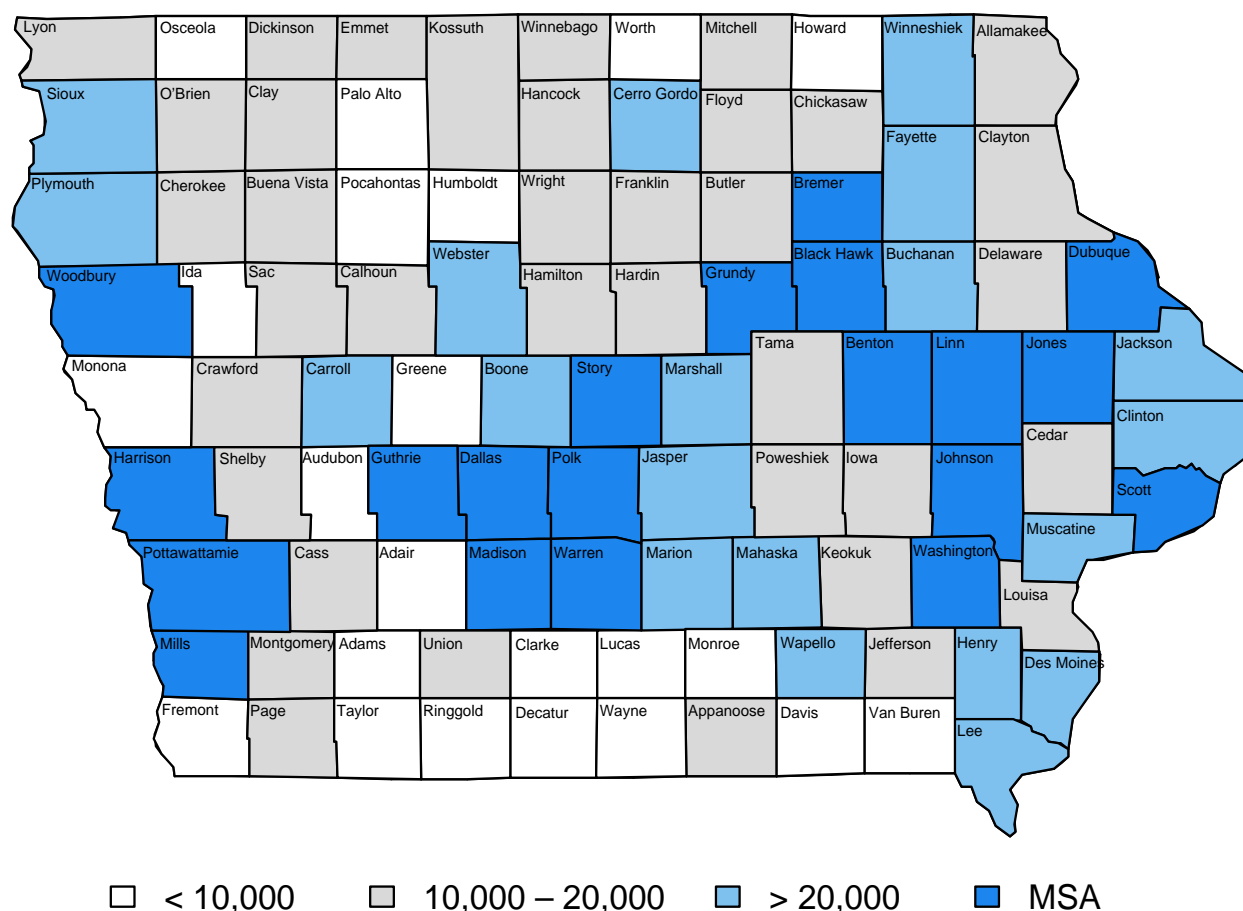
The time interval covered differs across the data items, mainly due to differences in data availability. Where reasonable and possible, county-specific data are presented. When it is not presented in that format, it is either because the data were too sparse (that is, a relatively small number of counties with non-zero counts) or they were not available at the county level. Since many of the data items presented would be expected to vary with county population size, the counties have been organized into groups based on their county population size. Both crude and age-adjusted population rates are presented when reasonable, which also facilitates comparisons across counties. For data items in which historical counts earlier than those presented in this book are available, line graphs showing time trends by county grouping are presented as well.

Four County Groupings

An MSA (Metropolitan Statistical Area) county is defined by the U. S. Census Bureau as a central city along with the counties economically and socially connected to it. Each MSA must have one city with at least 50,000 inhabitants or a Census-defined urbanized area with a total metropolitan population of at least 100,000 (75,000 in New England). Under the year 2000 standards, rural counties may be included in an MSA if at least 25 percent of the workers who live in the county work within the central county or counties (that is, the county or counties containing the urban core of 50,000 or more population) of the MSA. A county can also be included if at least 25 percent of the jobs in the county are filled by workers living in the central counties of the MSA. This definition was updated following the 2000 Census resulting in many newly classified MSA counties.

There were twenty counties defined by the U. S. Census Bureau as MSA from the 2000 Census. The seventy-nine other counties were classified into groups based on population size using a 10 year average from 1999 – 2008. Three counties switched groups from the 2007 Iowa Health Fact Book to this 2009 version. They were Greene and Humboldt Counties which moved into the <10,000 group and Buena Vista County which moved into the 10,000 – 20,000 group. The result is 22 counties with less than 10,000 residents, 37 counties with 10,000 to 20,000 residents and 20 counties with 20,000 to 50,000 residents. See the map on the following page to identify the counties in each group.

County Group Based on 1999–2008 Average Population



Small Numbers

If the number of county-specific events in a health outcome table was less than five, we masked the count by replacing it with an asterisk (*) to protect subject confidentiality. However, all numbers are included in the computations needed for the line graphs and other charts accompanying the health outcomes tables, which summarizes data over a larger number of people. If only one value in a county grouping is masked with an (*), then we do not report the grouping total, only a range of possible values.

Population Standard

The Year 2000 Estimated United States Standard Million Population from the United States Census Bureau has been used for adjustment purposes.

Adjustment Calculations

Both crude and age-adjusted rates have been calculated and presented in many of the data tables. Crude rates for an entity (e.g., county) are the number of events of a health outcome divided by the population at risk in the county. The age-adjusted rates used in this book are a weighted average of the age-specific rates from the targeted population (e.g., county), where the weights are the proportions of persons in the corresponding age groups of a standard population. As stated above, the Year 2000 United States population was used as the standard population. If data only represent one age group then the age-adjusted rate is identical to the crude rate and thus not reported (e.g., Live Births).

There are no hard and fast rules as to when one should use either the crude or the adjusted rate for comparisons. A few guidelines can, however, be noted. A crude rate for a county reflects the disease or mortality burden for a county and may be useful to the health policy makers in the county. If a county has a relatively high proportion of elderly and the disease is associated with older individuals, crude rates will reflect that higher burden due to greater numbers of elderly. The age-adjusted rate is also useful as a county comparison index, but after putting both counties on the same playing field with respect to the age distribution in each. These rates have been adjusted to the same standard population, so the effect of differing age distributions in two counties is eliminated before the comparison is made. Hence, both are useful descriptive indices of diseases, but with differences in interpretation.

Ranks

The county rank represents the ranking of the county among the 99 counties of Iowa, with a rank of “1” given to the county with the largest rate and “99” to the county with the smallest rate. In general, ranks were presented for a data table when no counts in the table were less than five; i.e. when there were no very small numbers.

Maps

State maps were created to present the data for Health Care Providers and Health Care Facilities instead of tables. The number in the county represents the 2009 count. The crude rates were calculated from the estimated 2008 county population. These rates were grouped into four categories of approximately twenty-five counties each and shaded on the map. If a county rate fell on the border between two categories, it was shaded using the smaller region.

Healthy Iowans 2010 Leading Indicators



Healthy Iowans 2010, Iowa's master plan for health, drew on the expertise and experience of hundreds of Iowans who reviewed data from many sources before setting goals and action steps. Published in January 2000, *Healthy Iowans 2010* is a companion to *Healthy People 2010*, the federal plan aimed at preventing disease and promoting health. Both plans drive funding.

In July 2005, a midcourse revision was published and was a product of about 425 people from public, private, and non-profit entities. There are 25 chapters, a team for each chapter, 217 goals, and more than 430 action steps. To reach the goals, teams crafted specific action steps to be taken with a time line for each step and an organization responsible for the action. Each year, the organizations that agreed to take action that year are asked to report progress. A tracking system, an integral part of implementation, assures accountability.

New to the updated plan are chapters on vision and on emergency preparedness and response, a glossary of acronyms, and goal cross references at the end of each chapter. Each chapter is introduced with a progress report on what *Healthy Iowans 2010* steps have been taken and goals achieved during the first part of the decade. Special attention in each chapter is paid to the Olmstead decision, a US Supreme Court decision requiring (1) Government services to be delivered in a way that avoids discrimination against people with disabilities and (2) States to administer programs, services, and activities in the most integrated setting appropriate to the needs of qualified people with disabilities.

What continues is the idea that when stakeholders decide on disease prevention and health promotion strategies and agree to work together on them, all Iowans benefit. In making those decisions, the teams analyzed relevant data. A database has been published on the Iowa Department of Public Health Web site: www.idph.state.ia.us.

The following pages contain many of the goals based on mortality data analysis. We report the baseline value as stated in the midcourse revision, the most current level of the indicator, and the 2010 target level. For 13 of the 16 goals, the most current levels indicate progress is being made toward reaching the 2010 target level. For motor vehicle fatalities, the 2010 goal has already been surpassed given the current level rate.

Healthy Iowans 2010 Mortality Goals

Mortality Goals (Chapter-Section)	Goal Statement	Baseline rate ¹ (year)	2002-2004	2004-2006	Midcourse Revision 2010 Goal ¹
Cancer					
Lung cancer (2-4)	Reduce lung cancer deaths to a rate of no more than 46.0 per 100,000	54.1 (1994-1996)	52.3	52.3	46.0
Breast cancer (2-5)	Reduce female breast cancer deaths to a rate of no more than 19.0 per 100,000 females	29.0 (1994-1996)	23.3	22.0	19.0
Cervical cancer (2-6)	Reduce cervical cancer deaths to a rate of no more than 1.9 per 100,000 females	2.6 (1994-1996)	2.4	2.1	1.9
Colorectal cancer (2-7)	Reduce colorectal cancer deaths to a rate of no more than 15.5 per 100,000	23.2 (1994-1996)	19.4	18.3	15.5
Oral cavity cancer (2-8)	Reduce oral cavity and pharyngeal cancer deaths to a rate of no more than 1.8 per 100,000	2.6 (1994-1996)	2.4	2.6	1.8
Prostate cancer (2-9)	Reduce prostate cancer deaths to a rate of no more than 26.0 per 100,000	36.0 (1994-1996)	27.7	24.8	26.0
Skin melanoma (2-10)	Reduce skin melanoma (<u>malignant cancer</u>) deaths to a rate of no more than 1.9 per 100,000	2.5 (1994-1996)	2.3	2.6	1.9

¹ Age-adjusted Rates per 100,000 population

Source: State Health Registry of Iowa

Healthy Iowans 2010 Mortality Goals (continued)

Mortality Goals (Chapter-Section)	Goal Statement	Baseline rate (year)	2005	2007	Midcourse Revision 2010 Goal
<u>Diabetes</u> Diabetes (3-4)	Decrease death and disability with diabetes as the primary cause to 16.0 per 100,000 people in 2010 (480 per year)	24.8 ¹ (2002)	24.3 ¹	25.7 ¹	16.0 ¹
<u>Heart Disease and Stroke</u> Coronary heart disease (9-1)	Reduce by 13% heart disease deaths among all Iowans	266.0 ¹ (2003)	250.4 ¹	229.4 ¹	232.0 ¹
Stroke (9-2)	Reduce by 16% stroke deaths among all Iowans	70.4 ¹ (2003)	64.0 ¹	56.5 ¹	59.0 ¹
<u>Maternal, Infant, and Child Health</u> Infant (11-1)	Reduce the overall infant mortality rate to no more than 5 per 1,000 live births	6.0 ² (1998)	5.3 ²	4.6 ²	5.0 ²
Perinatal mortality (11-8)	Reduce the overall perinatal mortality rate to no more than 7.1 per 1,000 live births plus fetal deaths	8.4 ² (2002)	8.7 ²	8.1 ²	7.1 ²
<u>Unintentional Injuries</u> Falls (22-2)	Reduce deaths from falls and fall-related injuries to no more than 2.3 per 100,000 people	11.5 ¹ (1997)	10.6 ¹	11.9 ¹	2.3 ¹
<u>Unintentional Injuries</u> Poisoning (22-8)	Reduce deaths in Iowa caused by unintentional poisoning to 1.0 per 100,000 people (30 per year).	1.9 ¹ (2001)	3.5 ¹	4.8 ¹	1.0 ¹
Fire (22-9)	Reduce Iowa's fire death rate to less than one per 100,000 people	1.7 ¹ (1990-1999)	1.1 ¹	0.8 ¹	< 1.0 ¹
Motor vehicle crashes (22-10)	Reduce deaths by motor vehicle crashes to no more than 5.6 per 100,000 people in children aged 14 and younger	6.3 ¹ (1994)	4.3 ¹	4.6 ¹	5.6 ¹

¹Crude Rates per 100,000 population²Crude Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics

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Demographics

Many of the health indicators in the 2009 Iowa Health Fact Book are presented with rates calculated using the population of the county and state. These rates are also stratified into population subgroups based on a 10-year average of each county's population. This not only contrasts the rural and urban aspects of the state but also includes trends in age and ethnic distribution of the population. The Year 2000 U.S. standard population age distribution is used for calculating age-adjusted rates. Population estimates have been obtained from the U.S. Census and from the State Health Registry of Iowa via the National Cancer Institute's SEER*Stat software program. Estimates are used for individual years and for year groupings where appropriate.

KEY FEATURES IN IOWA DEMOGRAPHICS...

- ✓ Increasing urbanization
- ✓ Females represent 50.6% of population
- ✓ Median age 38.1 years
- ✓ Over 65 represents 15% of population

The population in Iowa is becoming increasingly urbanized. Using the 2000 Census, twenty counties were defined as Metropolitan Statistical Areas (MSA) doubling the previous number of ten MSA defined counties. The Metropolitan Statistical Areas are Ames (Story County), Cedar Rapids (Benton, Jones, Linn Counties), Davenport (Scott County), Des Moines (Dallas, Guthrie, Madison, Polk, Warren Counties), Dubuque (Dubuque County), Iowa City (Johnson, Washington Counties), Omaha-Council Bluffs (Harrison, Mills, Pottawattamie Counties), Sioux City (Woodbury County), Waterloo-Cedar Falls (Black Hawk, Bremer, Grundy Counties). The estimated population in Iowa

CHARACTERISTICS OF RACE / ETHNICITY

White	94.2%
Black or African American	2.7%
Asian	1.6%
Some other race or races	1.5%
Hispanic or Latino (of any race)	4.2%

surpassed 3 million people in 2008 and over 56% of the 2008 estimated Iowa population of 3,002,555 lived in MSA counties.

The distribution of the population by age is different among the county groupings. The larger counties have a greater percentage of their population as young adults (15-44 years) compared to the

smaller counties. Conversely, the smaller counties have a larger percentage of persons 65 years of age or older. These differences in age distributions are standardized through age-adjustment so risk factors other than age can be compared. As shown, the population of the state has become older since 1970. The percent of Iowans age 65 and older increased steadily through the early 1990's, but has slightly decreased since then.

State Population Distributions

Estimated Annual Population Distribution 1999-2008

	County	1999	2000	2001	2002	2003	2004	2005
Counties with Average Population < 10,000	Adair	8,298	8,243	8,077	7,965	7,917	7,848	7,721
	Adams	4,498	4,482	4,397	4,352	4,322	4,257	4,161
	Audubon	6,896	6,830	6,654	6,547	6,434	6,374	6,248
	Clarke	8,908	9,133	9,181	9,172	9,217	9,228	9,084
	Davis	8,518	8,541	8,571	8,566	8,498	8,561	8,514
	Decatur	8,646	8,689	8,656	8,550	8,478	8,465	8,472
	Fremont	7,997	8,010	7,869	7,772	7,714	7,618	7,570
	Greene	10,394	10,366	10,145	10,100	10,009	9,941	9,795
	Howard	9,950	9,932	9,868	9,796	9,715	9,682	9,624
	Humboldt	10,414	10,381	10,282	10,078	10,020	9,944	9,810
	Ida	7,914	7,837	7,659	7,547	7,444	7,295	7,169
	Lucas	9,461	9,422	9,443	9,439	9,474	9,623	9,592
	Monona	10,056	10,020	9,819	9,706	9,685	9,514	9,348
	Monroe	8,061	8,016	7,934	7,788	7,805	7,778	7,722
	Osceola	7,049	7,003	6,939	6,853	6,818	6,773	6,633
	Palo Alto	10,137	10,147	10,029	9,845	9,670	9,660	9,586
	Pocahontas	8,808	8,662	8,461	8,341	8,150	7,978	7,804
	Ringgold	5,449	5,469	5,390	5,294	5,264	5,248	5,193
	Taylor	6,905	6,958	6,898	6,822	6,750	6,692	6,537
	Van Buren	7,784	7,809	7,736	7,737	7,673	7,666	7,628
	Wayne	6,738	6,730	6,642	6,640	6,573	6,508	6,428
	Worth	7,890	7,909	7,802	7,797	7,722	7,713	7,721
	Total	180,771	180,589	178,452	176,707	175,352	174,366	172,360
Counties with Average Population 10,000 – 20,000	Allamakee	14,651	14,675	14,346	14,336	14,400	14,412	14,474
	Appanoose	13,709	13,721	13,560	13,380	13,457	13,364	13,327
	Buena Vista	20,508	20,411	20,193	20,144	19,989	19,804	19,720
	Butler	15,286	15,305	15,007	14,827	14,785	14,786	14,718
	Calhoun	11,190	11,115	10,946	10,719	10,524	10,392	10,252
	Cass	14,649	14,684	14,473	14,211	14,225	14,075	13,916
	Cedar	18,178	18,187	18,076	18,052	18,063	18,037	17,944
	Cherokee	13,096	13,035	12,839	12,534	12,352	12,218	12,030
	Chickasaw	13,209	13,095	13,052	12,772	12,560	12,448	12,280
	Clay	17,339	17,372	17,249	17,062	16,949	16,908	16,777
	Clayton	18,825	18,678	18,454	18,218	18,119	18,043	17,876
	Crawford	16,911	16,942	16,878	16,826	16,724	16,642	16,554
	Delaware	18,444	18,404	18,212	18,123	17,978	17,798	17,622
	Dickinson	16,333	16,424	16,476	16,348	16,322	16,480	16,610
	Emmet	11,103	11,027	10,875	10,799	10,687	10,513	10,476
	Floyd	16,959	16,900	16,618	16,587	16,512	16,420	16,311
	Franklin	10,780	10,704	10,603	10,633	10,568	10,607	10,610
	Hamilton	16,387	16,438	16,168	16,212	16,161	16,023	15,937
	Hancock	12,091	12,100	11,904	11,761	11,772	11,671	11,624
	Hardin	18,784	18,812	18,650	18,424	18,217	18,008	17,775
	Iowa	15,570	15,671	15,784	15,762	15,836	15,812	15,925
	Jefferson	16,282	16,181	16,034	15,804	15,723	15,688	15,560
	Keokuk	11,317	11,400	11,374	11,344	11,198	11,079	10,899
	Kossuth	17,258	17,163	16,779	16,496	16,290	16,151	15,949
	Louisa	12,174	12,183	12,167	12,195	12,176	12,049	11,775
	Lyon	11,812	11,763	11,637	11,589	11,569	11,526	11,467
	Mitchell	10,895	10,874	10,739	10,828	10,831	10,896	10,791
	Montgomery	11,767	11,771	11,508	11,302	11,190	11,163	11,179

State Population Distributions (continued)

Estimated Annual Population Distribution 1999-2008								
	County	2006	2007	2008	Percent Change ¹	Ten Year Average ²	Male ³	Female ³
Counties with Average Population < 10,000	Adair	7,679	7,621	7,506	-8.9%	7,887	3,829	4,004
	Adams	4,137	4,085	4,040	-9.9%	4,273	2,103	2,148
	Audubon	6,147	6,058	6,033	-11.7%	6,422	3,064	3,295
	Clarke	9,061	8,979	9,032	-1.1%	9,099	4,559	4,603
	Davis	8,531	8,560	8,569	0.3%	8,543	4,253	4,286
	Decatur	8,402	8,432	8,409	-3.2%	8,520	4,164	4,319
	Fremont	7,565	7,553	7,446	-7.0%	7,711	3,799	3,858
	Greene	9,569	9,479	9,293	-10.4%	9,909	4,842	5,053
	Howard	9,540	9,516	9,484	-4.5%	9,711	4,816	4,868
	Humboldt	9,732	9,578	9,514	-8.4%	9,975	4,888	5,045
	Ida	6,989	6,930	6,862	-12.4%	7,365	3,580	3,717
	Lucas	9,460	9,433	9,290	-1.4%	9,464	4,657	4,869
	Monona	9,181	9,071	8,966	-10.5%	9,537	4,620	4,875
	Monroe	7,644	7,583	7,577	-5.5%	7,791	3,799	3,954
	Osceola	6,581	6,451	6,444	-8.0%	6,754	3,337	3,398
	Palo Alto	9,455	9,427	9,345	-7.9%	9,730	4,745	4,911
	Pocahontas	7,685	7,666	7,560	-12.7%	8,111	3,960	4,042
	Ringgold	5,142	5,141	5,156	-5.7%	5,275	2,552	2,682
	Taylor	6,512	6,391	6,298	-9.5%	6,676	3,255	3,415
	Van Buren	7,663	7,672	7,676	-1.7%	7,704	3,829	3,851
	Wayne	6,374	6,269	6,253	-7.1%	6,515	3,108	3,405
	Worth	7,653	7,657	7,661	-3.1%	7,752	3,863	3,866
	Total	170,702	169,552	168,414	-6.7%	174,726	85,622	88,464
Counties with Average Population 10,000 – 20,000	Allamakee	14,489	14,494	14,538	-0.9%	14,481	7,308	7,155
	Appanoose	13,182	12,986	12,850	-6.3%	13,354	6,414	6,937
	Buena Vista	19,655	19,585	19,702	-3.5%	19,971	10,068	9,852
	Butler	14,662	14,654	14,644	-4.3%	14,867	7,313	7,455
	Calhoun	10,121	9,962	9,887	-11.0%	10,511	5,267	5,145
	Cass	13,895	13,855	13,840	-5.7%	14,182	6,858	7,220
	Cedar	17,981	17,963	18,079	-0.6%	18,056	8,907	9,123
	Cherokee	11,823	11,679	11,552	-11.4%	12,316	6,023	6,181
	Chickasaw	12,281	12,184	12,121	-7.4%	12,600	6,246	6,233
	Clay	16,733	16,686	16,691	-3.9%	16,977	8,209	8,685
	Clayton	17,775	17,672	17,566	-6.0%	18,123	8,962	9,055
	Crawford	16,482	16,516	16,415	-3.1%	16,689	8,409	8,282
	Delaware	17,511	17,450	17,301	-6.0%	17,884	8,857	8,956
	Dickinson	16,668	16,669	16,775	2.1%	16,510	8,067	8,427
	Emmet	10,417	10,397	10,457	-5.2%	10,675	5,208	5,378
	Floyd	16,339	16,269	16,183	-4.2%	16,510	7,989	8,461
	Franklin	10,497	10,548	10,477	-2.1%	10,603	5,282	5,332
	Hamilton	15,762	15,558	15,357	-6.6%	16,000	7,982	8,052
	Hancock	11,546	11,368	11,354	-6.2%	11,719	5,766	5,918
	Hardin	17,616	17,473	17,371	-7.7%	18,113	8,858	9,167
	Iowa	15,957	15,860	15,877	1.3%	15,805	7,778	8,098
	Jefferson	15,501	15,551	15,463	-4.4%	15,779	7,690	7,982
	Keokuk	10,774	10,750	10,697	-6.2%	11,083	5,405	5,668
	Kossuth	15,710	15,590	15,463	-9.9%	16,285	7,910	8,217
	Louisa	11,766	11,768	11,725	-3.8%	11,998	5,976	6,036
	Lyon	11,366	11,247	11,234	-4.5%	11,521	5,737	5,777
	Mitchell	10,781	10,745	10,710	-1.5%	10,809	5,318	5,514
	Montgomery	11,137	10,978	10,870	-7.7%	11,286	5,318	5,885

¹Percent change from 2000 to 2008²1999-2008 Average³2002-2006 Average

Source: Population Division, U.S. Census Bureau and SEER*Stat

State Population Distributions (continued)

Estimated Annual Population Distribution 1999-2008								
Counties with Average Population 10,000 – 20,000	County	1999	2000	2001	2002	2003	2004	2005
	O'Brien	15,200	15,102	14,881	14,683	14,587	14,340	14,249
	Page	17,112	16,976	16,869	16,425	16,166	16,002	16,007
	Poweshiek	18,797	18,815	18,850	18,756	18,809	18,805	18,643
	Sac	11,686	11,529	11,359	11,042	10,852	10,725	10,540
	Shelby	13,179	13,173	12,995	12,844	12,754	12,657	12,419
	Tama	18,121	18,103	18,013	17,903	17,850	17,938	17,910
	Union	12,397	12,309	12,202	12,084	11,885	11,925	11,951
	Winnebago	11,660	11,723	11,535	11,336	11,317	11,211	11,203
	Wright	14,379	14,334	14,056	13,826	13,627	13,537	13,373
	Total	548,038	547,099	541,361	536,187	533,024	530,153	526,673
Counties with Average Population > 20,000	Boone	26,164	26,224	26,220	26,044	26,137	26,243	26,334
	Buchanan	21,158	21,093	20,942	20,758	20,774	20,849	20,757
	Carroll	21,631	21,421	21,210	21,135	20,983	20,890	20,918
	Cerro Gordo	46,637	46,447	45,741	45,264	45,146	44,664	44,341
	Clinton	50,346	50,149	49,841	49,600	49,471	49,358	49,268
	Des Moines	42,515	42,351	41,916	41,305	41,132	40,725	40,540
	Fayette	22,011	22,008	21,675	21,429	21,305	21,034	20,954
	Henry	20,351	20,336	20,337	19,969	20,106	20,074	20,167
	Jackson	20,217	20,296	20,255	20,122	20,107	20,090	20,051
	Jasper	37,096	37,213	37,269	37,369	37,406	37,266	37,028
	Lee	38,281	38,052	37,381	36,855	36,473	36,394	36,125
	Mahaska	22,400	22,335	22,377	22,311	22,026	22,069	22,233
	Marion	31,879	32,052	32,506	32,411	32,279	32,263	32,321
	Marshall	39,313	39,311	39,263	39,026	39,040	39,251	39,066
	Muscatine	41,587	41,722	41,786	41,796	41,674	41,810	41,968
	Plymouth	24,774	24,849	24,749	24,562	24,597	24,709	24,577
	Sioux	31,669	31,589	31,738	31,792	31,780	31,867	31,909
	Wapello	36,042	36,051	35,952	35,802	35,720	35,660	35,785
	Webster	40,255	40,235	40,036	39,667	39,368	38,932	38,579
	Winneshiek	21,289	21,310	21,238	21,127	20,903	20,906	20,886
	Total	635,615	635,044	632,432	628,344	626,427	625,054	623,807
MSA Counties	Benton	25,214	25,308	25,618	25,988	26,174	26,494	26,647
	Black Hawk	127,786	128,012	127,624	126,622	126,090	126,243	126,549
	Bremer	23,398	23,325	23,403	23,206	23,283	23,388	23,420
	Dallas	39,691	40,750	42,721	44,331	46,317	49,400	51,796
	Dubuque	88,934	89,143	88,988	89,205	90,109	90,633	90,975
	Grundy	12,332	12,369	12,287	12,305	12,243	12,249	12,238
	Guthrie	11,403	11,353	11,222	11,221	11,319	11,361	11,214
	Harrison	15,510	15,666	15,639	15,499	15,549	15,549	15,530
	Johnson	109,814	111,006	113,849	115,534	117,460	119,764	121,236
	Jones	20,220	20,221	20,159	20,152	20,217	20,373	20,313
	Linn	189,931	191,701	194,295	195,893	196,707	198,139	200,191
	Madison	13,898	14,019	14,150	14,317	14,457	14,693	14,870
	Mills	14,478	14,547	14,482	14,535	14,600	14,701	14,853
	Polk	370,592	374,601	381,062	385,879	390,308	394,352	402,762
	Pottawattamie	87,153	87,704	87,662	87,933	88,044	88,784	88,981
	Scott	158,765	158,668	158,501	158,622	158,758	159,307	160,101
	Story	79,372	79,981	80,052	81,607	81,481	81,957	81,852
	Warren	40,340	40,671	41,017	41,296	41,963	42,294	42,962
	Washington	20,578	20,670	21,005	20,993	21,008	21,029	21,057
	Woodbury	103,801	103,877	103,313	103,019	102,517	102,456	101,388
	Total	1,553,210	1,563,592	1,577,049	1,588,157	1,598,604	1,613,166	1,628,935

State Population Distributions (continued)

Estimated Annual Population Distribution 1999-2008								
	County	2006	2007	2008	Percent Change ¹	Ten Year Average ²	Male ³	Female ³
Counties with Average Population 10,000 – 20,000	O'Brien	14,184	14,060	13,952	-7.6%	14,524	7,100	7,326
	Page	16,046	15,896	15,664	-7.7%	16,316	8,247	7,892
	Poweshiek	18,670	18,713	18,590	-1.2%	18,745	9,060	9,694
	Sac	10,528	10,360	10,311	-10.6%	10,893	5,291	5,461
	Shelby	12,305	12,310	12,131	-7.9%	12,677	6,213	6,393
	Tama	17,828	17,767	17,690	-2.3%	17,912	8,816	9,090
	Union	12,059	12,156	12,261	-0.4%	12,123	5,755	6,231
	Winnebago	11,011	10,927	10,901	-7.0%	11,282	5,475	5,757
	Wright	13,145	13,021	12,903	-10.0%	13,620	6,698	6,829
	Total	524,203	521,667	519,602	-5.0%	532,801	261,780	268,864
Counties with Average Population > 20,000	Boone	26,314	26,355	26,349	0.5%	26,238	12,872	13,360
	Buchanan	20,844	20,903	21,032	-0.3%	20,911	10,368	10,439
	Carroll	20,838	20,926	20,926	-2.3%	21,088	10,231	10,734
	Cerro Gordo	44,128	44,004	43,786	-5.7%	45,016	21,567	23,167
	Clinton	49,183	49,056	48,942	-2.4%	49,521	24,045	25,361
	Des Moines	40,459	40,587	40,629	-4.1%	41,216	19,851	21,095
	Fayette	20,701	20,397	20,273	-7.9%	21,179	10,437	10,666
	Henry	20,101	20,173	20,213	-0.6%	20,183	10,251	9,841
	Jackson	20,058	20,018	19,965	-1.6%	20,118	9,951	10,154
	Jasper	36,816	36,647	36,583	-1.7%	37,069	18,898	18,305
	Lee	35,877	35,706	35,408	-6.9%	36,655	18,068	18,298
	Mahaska	22,153	22,253	22,321	-0.1%	22,248	11,094	11,084
	Marion	32,728	32,489	32,571	1.6%	32,350	16,102	16,316
	Marshall	38,934	39,214	39,523	0.5%	39,194	19,450	19,677
	Muscatine	42,190	42,335	42,504	1.9%	41,937	20,827	21,113
	Plymouth	24,485	24,338	24,323	-2.1%	24,596	12,282	12,318
	Sioux	32,118	32,044	32,200	1.9%	31,871	15,746	16,162
	Wapello	35,718	35,459	35,513	-1.5%	35,770	17,501	18,264
	Webster	38,635	38,606	38,517	-4.3%	39,283	19,784	19,290
	Winneshiek	20,847	20,888	20,913	-1.9%	21,031	10,346	10,605
	Total	623,127	622,398	622,491	-2.0%	627,474	309,671	316,249
MSA Counties	Benton	26,564	26,501	26,532	4.8%	26,104	13,158	13,220
	Black Hawk	127,005	127,204	128,347	0.3%	127,148	61,039	65,657
	Bremer	23,583	23,723	23,690	1.6%	23,442	11,379	12,015
	Dallas	54,612	57,201	59,930	47.1%	48,675	2,447	24,879
	Dubuque	91,398	92,296	92,724	4.0%	90,440	44,190	46,327
	Grundy	12,237	12,147	12,183	-1.5%	12,259	6,044	6,223
	Guthrie	11,066	11,015	10,956	-3.5%	11,213	5,578	5,673
	Harrison	15,507	15,403	15,222	-2.8%	15,507	7,629	7,907
	Johnson	123,126	125,454	128,094	15.4%	118,534	59,476	60,178
	Jones	20,331	20,350	20,346	0.6%	202,684	10,665	9,623
	Linn	202,488	205,621	208,574	8.8%	198,354	97,517	101,289
	Madison	15,194	15,377	15,507	10.6%	146,484	7,302	7,417
	Mills	15,117	15,123	15,113	3.9%	14,755	7,423	7,354
	Polk	410,089	417,668	424,778	13.4%	395,209	193,428	203,870
	Pottawattamie	89,284	89,355	89,647	2.2%	88,455	43,426	45,242
	Scott	161,476	162,445	164,690	3.8%	160,133	78,369	81,403
	Story	83,505	85,306	86,754	8.5%	82,187	42,354	39,940
	Warren	43,698	44,408	45,059	10.8%	42,371	20,793	21,678
	Washington	21,162	21,236	21,343	3.3%	21,008	10,220	10,840
	Woodbury	101,796	101,910	102,559	-1.3%	102,664	50,220	52,202
	Total	1,649,238	1,669,743	1,692,048	8.2%	1,613,374	794,657	822,937

¹Percent change from 2000 to 2008²1999-2008 Average³2002-2006 Average

Source: Population Division, U.S. Census Bureau and SEER*Stat

Average Annual Population Distribution by Age: 2002-2006

Counties with Average Population < 10,000	County	% <1	% 1-4	% 5-14	% 15-24	% 25-44	% 45-64	% 65-84	% 85 +
	Adair	0.9%	3.8%	12.2%	12.3%	22.9%	25.7%	17.4%	4.8%
	Adams	1.0%	3.9%	12.9%	11.5%	22.9%	26.1%	17.9%	3.9%
	Audubon	1.0%	3.9%	13.9%	11.8%	20.6%	26.0%	18.2%	4.6%
	Clarke	1.4%	5.4%	13.7%	12.7%	25.1%	25.2%	13.5%	3.0%
	Davis	1.4%	5.7%	14.4%	12.9%	23.9%	24.6%	13.8%	3.2%
	Decatur	1.1%	4.4%	11.9%	21.2%	20.9%	22.6%	14.7%	3.1%
	Fremont	1.1%	4.4%	13.2%	11.7%	22.3%	27.4%	16.6%	3.3%
	Greene	1.0%	4.2%	13.2%	12.4%	22.1%	25.5%	17.0%	4.6%
	Howard	1.2%	4.7%	14.0%	12.3%	23.7%	24.3%	16.0%	3.9%
	Humboldt	1.2%	4.4%	12.3%	13.5%	21.3%	26.5%	16.9%	3.9%
	Ida	1.1%	4.3%	12.7%	12.2%	21.5%	26.5%	17.8%	3.8%
	Lucas	1.1%	4.7%	14.0%	12.8%	24.6%	24.6%	14.7%	3.5%
	Monona	1.1%	4.3%	12.4%	10.9%	22.1%	26.0%	18.3%	5.0%
	Monroe	1.1%	4.7%	13.7%	12.2%	24.0%	25.2%	15.8%	3.3%
	Osceola	1.1%	4.6%	13.5%	13.2%	23.3%	25.7%	15.4%	3.3%
	Palo Alto	1.2%	4.4%	11.9%	15.5%	20.7%	24.7%	17.5%	4.1%
	Pocahontas	0.9%	3.6%	12.5%	12.5%	19.7%	28.0%	18.5%	4.2%
	Ringgold	1.2%	4.8%	12.3%	12.6%	20.6%	25.1%	19.3%	4.2%
	Taylor	1.1%	4.5%	12.8%	12.6%	22.1%	25.5%	17.3%	4.1%
	Van Buren	1.2%	4.5%	13.2%	12.6%	23.0%	26.4%	15.8%	3.3%
	Wayne	1.2%	4.6%	12.6%	12.3%	21.1%	25.4%	18.7%	4.1%
	Worth	1.0%	4.3%	12.8%	11.7%	24.7%	26.8%	15.2%	3.5%
	Total	1.1%	4.5%	13.0%	13.0%	22.5%	25.6%	16.5%	3.8%

Counties with Average Population 10,000 – 20,000	County	% <1	% 1-4	% 5-14	% 15-24	% 25-44	% 45-64	% 65-84	% 85 +
	Allamakee	1.3%	4.8%	13.2%	12.2%	24.6%	25.6%	15.0%	3.1%
	Appanoose	1.2%	4.6%	12.4%	12.7%	23.8%	25.4%	16.2%	3.6%
	Buena Vista	1.3%	4.8%	14.2%	17.0%	22.8%	24.0%	13.0%	2.9%
	Butler	1.1%	4.3%	12.7%	12.2%	22.6%	27.4%	16.4%	3.4%
	Calhoun	1.0%	3.7%	11.6%	12.0%	22.6%	26.9%	17.9%	4.4%
	Cass	1.1%	4.4%	12.4%	11.8%	22.6%	26.6%	17.1%	4.1%
	Cedar	1.1%	4.5%	13.5%	12.7%	25.1%	27.1%	13.0%	3.1%
	Cherokee	0.9%	4.0%	12.5%	12.3%	21.3%	27.9%	17.8%	3.3%
	Chickasaw	1.2%	4.6%	13.7%	13.0%	22.7%	26.7%	15.2%	2.9%
	Clay	1.2%	4.8%	12.8%	12.0%	25.1%	25.8%	15.3%	3.1%
	Clayton	1.1%	4.5%	13.2%	12.3%	23.4%	26.8%	15.4%	3.3%
	Crawford	1.4%	5.4%	13.6%	14.1%	23.8%	25.0%	13.8%	2.9%
	Delaware	1.1%	4.7%	14.9%	13.7%	24.6%	25.1%	13.3%	2.6%
	Dickinson	1.0%	4.3%	11.5%	11.4%	22.6%	28.2%	17.6%	3.3%
	Emmet	1.3%	4.7%	12.0%	15.6%	22.1%	25.2%	15.5%	3.6%
	Floyd	1.2%	4.7%	13.5%	12.1%	23.2%	25.9%	15.8%	3.6%
	Franklin	1.2%	4.6%	12.8%	12.5%	22.8%	26.5%	16.2%	3.4%
	Hamilton	1.1%	4.8%	13.5%	12.3%	25.2%	25.1%	15.0%	3.0%
	Hancock	1.1%	4.3%	13.6%	13.0%	22.7%	27.0%	15.0%	3.3%
	Hardin	1.1%	4.6%	12.2%	14.9%	21.4%	25.4%	16.4%	4.1%
	Iowa	1.2%	4.7%	14.6%	12.3%	25.1%	24.9%	13.8%	3.4%
	Jefferson	1.0%	3.9%	11.9%	13.5%	21.9%	33.7%	11.4%	2.5%
	Keokuk	1.2%	4.8%	13.8%	12.2%	23.3%	25.4%	15.5%	3.8%
	Kossuth	1.0%	4.1%	13.0%	12.6%	20.9%	27.3%	17.5%	3.4%
	Louisa	1.3%	5.5%	15.0%	12.8%	26.8%	24.2%	12.2%	2.2%
	Lyon	1.4%	5.4%	14.9%	13.1%	23.4%	23.8%	14.7%	3.3%
	Mitchell	1.2%	5.0%	14.3%	12.6%	21.6%	24.4%	16.7%	4.3%
	Montgomery	1.2%	4.7%	13.4%	11.3%	23.3%	26.4%	15.8%	3.9%
	O'Brien	1.2%	4.5%	12.6%	12.9%	21.8%	25.0%	17.5%	4.5%

Average Annual Population Distribution by Age: 2002-2006 (cont.)

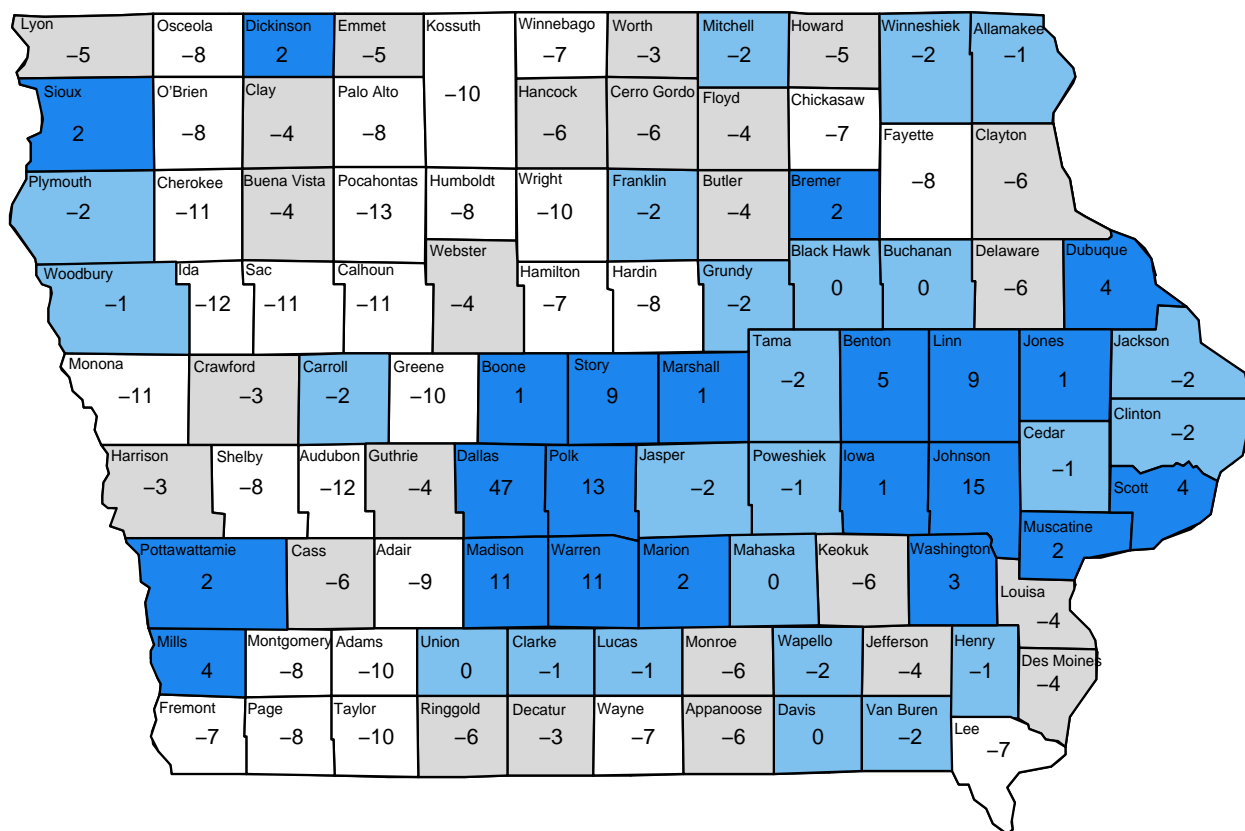
Counties with Average Population 10,000 – 20,000 (cont)	County	% <1	% 1-4	% 5-14	% 15-24	% 25-44	% 45-64	% 65-84	% 85 +
	Page	1.0%	4.2%	11.9%	12.9%	24.7%	25.3%	16.6%	3.4%
	Poweshiek	1.0%	4.2%	12.0%	17.7%	22.7%	24.6%	14.4%	3.3%
	Sac	1.0%	4.1%	12.6%	12.3%	20.8%	26.2%	18.3%	4.7%
	Shelby	1.0%	4.3%	13.7%	12.1%	22.7%	25.7%	16.9%	3.6%
	Tama	1.3%	5.3%	14.3%	12.8%	23.2%	24.8%	14.8%	3.4%
	Union	1.2%	4.5%	12.2%	13.2%	23.8%	26.3%	15.7%	3.1%
	Winnebago	1.0%	4.4%	12.6%	14.6%	21.7%	26.9%	15.1%	3.7%
	Wright	1.3%	4.7%	13.1%	11.5%	22.0%	26.6%	16.7%	4.1%
	Total	1.2%	4.6%	13.1%	13.1%	23.2%	26.1%	15.4%	3.4%

Counties with Average Population > 20,000	Boone	1.2%	4.7%	13.1%	13.6%	26.0%	25.7%	13.0%	2.8%
	Buchanan	1.5%	5.8%	14.6%	13.7%	24.9%	24.7%	12.5%	2.4%
	Carroll	1.2%	4.7%	13.6%	13.4%	23.5%	24.3%	15.5%	3.7%
	Cerro Gordo	1.1%	4.4%	12.7%	13.0%	25.0%	26.0%	14.9%	2.8%
	Clinton	1.2%	4.9%	13.7%	13.1%	25.2%	25.8%	13.6%	2.5%
	Des Moines	1.3%	4.9%	13.1%	12.7%	24.3%	26.8%	14.0%	2.9%
	Fayette	1.1%	4.2%	13.4%	13.7%	23.0%	25.2%	15.9%	3.5%
	Henry	1.1%	4.7%	12.9%	13.9%	27.7%	24.8%	12.2%	2.7%
	Jackson	1.0%	4.5%	13.7%	12.6%	24.5%	25.9%	14.9%	2.8%
	Jasper	1.2%	4.9%	13.4%	11.8%	27.2%	25.6%	13.5%	2.4%
	Lee	1.1%	4.5%	12.8%	12.4%	24.7%	27.8%	13.9%	2.7%
	Mahaska	1.3%	5.1%	13.6%	14.6%	25.6%	24.1%	13.2%	2.6%
	Marion	1.3%	4.9%	13.4%	15.5%	24.9%	24.2%	12.9%	2.8%
	Marshall	1.5%	5.6%	13.4%	12.7%	24.2%	26.4%	13.7%	2.5%
	Muscatine	1.5%	5.8%	14.5%	13.0%	27.0%	25.5%	10.9%	1.8%
	Plymouth	1.3%	5.1%	14.7%	13.9%	23.8%	25.7%	13.1%	2.5%
	Sioux	1.5%	5.7%	13.9%	20.8%	22.1%	21.1%	12.3%	2.7%
	Wapello	1.3%	5.2%	12.8%	13.5%	25.0%	25.2%	14.2%	2.8%
	Webster	1.2%	4.9%	13.0%	16.0%	23.9%	24.1%	13.9%	2.9%
	Winneshiek	0.9%	3.8%	11.7%	22.3%	21.8%	23.4%	13.2%	2.9%
	Total	1.2%	5.0%	13.4%	14.1%	24.8%	25.3%	13.5%	2.7%

MSA Counties	Benton	1.2%	5.0%	14.7%	13.2%	27.3%	24.0%	12.0%	2.6%
	Blackhawk	1.3%	4.9%	12.4%	19.4%	24.1%	23.9%	11.8%	2.3%
	Bremer	1.1%	4.3%	12.6%	18.1%	21.8%	25.8%	13.5%	2.8%
	Dallas	1.4%	5.8%	15.5%	13.5%	31.8%	22.6%	8.0%	1.5%
	Dubuque	1.3%	5.3%	13.7%	14.9%	25.2%	24.6%	12.5%	2.4%
	Grundy	1.0%	4.3%	13.0%	13.4%	22.7%	26.9%	15.3%	3.5%
	Guthrie	1.2%	4.8%	12.6%	11.5%	23.7%	26.8%	16.3%	3.1%
	Harrison	1.1%	4.6%	14.0%	12.5%	25.2%	25.4%	14.3%	3.0%
	Johnson	1.2%	4.9%	11.0%	25.1%	30.2%	19.9%	6.6%	1.1%
	Jones	1.0%	4.3%	12.7%	13.3%	27.5%	25.2%	13.5%	2.6%
	Linn	1.4%	5.6%	14.0%	13.5%	28.9%	24.0%	10.6%	1.9%
	Madison	1.3%	5.5%	14.5%	13.0%	26.2%	25.5%	11.4%	2.6%
	Mills	1.2%	4.9%	14.6%	13.2%	25.9%	27.8%	10.5%	1.8%
	Polk	1.6%	6.2%	14.2%	12.7%	30.6%	23.6%	9.3%	1.6%
	Pottawattamie	1.4%	5.5%	13.9%	13.5%	27.2%	24.9%	11.8%	1.8%
	Scott	1.4%	5.7%	14.3%	13.9%	27.0%	25.7%	10.4%	1.6%
	Story	1.1%	4.3%	9.7%	31.3%	25.2%	18.2%	8.3%	1.8%
	Warren	1.2%	5.0%	14.2%	15.6%	26.2%	25.4%	10.5%	1.8%
	Washington	1.4%	5.7%	14.0%	12.0%	25.1%	24.6%	13.9%	3.4%
	Woodbury	1.6%	6.1%	15.2%	13.9%	26.8%	23.4%	11.0%	1.9%
	Total	1.4%	5.5%	13.6%	15.8%	27.9%	23.7%	10.3%	1.9%

Source: Population Division, U.S. Census Bureau and SEER*Stat

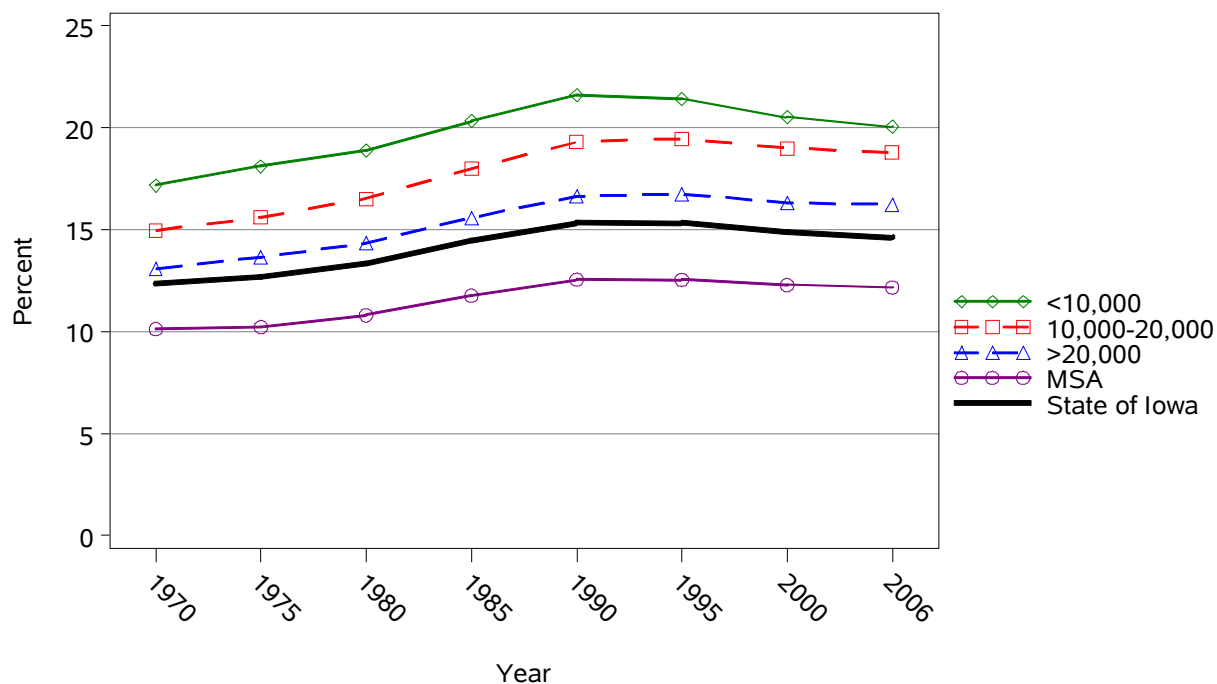
Percent Population Change from 2000 – 2008



□ -13 – -7 □ -7 – -3 □ -3 – 0 ■ 0 – 47

Aging Trend in Iowa

Percent of Iowans Age 65 and Older



Estimated Year 2000 U.S. Standard Population

Age Range	Population	Percent of Total
< 1	13,818	1.4%
01-04	55,317	5.5%
05-09	72,533	7.3%
10-14	73,032	7.3%
15-19	72,169	7.2%
20-24	66,478	6.6%
25-29	64,529	6.5%
30-34	71,044	7.1%
35-39	80,762	8.1%
40-44	81,851	8.2%
45-49	72,118	7.2%
50-54	62,716	6.3%
55-59	48,454	4.8%
60-64	38,793	3.9%
65-69	34,264	3.4%
70-74	31,773	3.2%
75-79	26,999	2.7%
80-84	17,842	1.8%
85+	15,508	1.6%
Total	1,000,000	100.0%

Source: Population Division, U.S. Census Bureau, and SEER*Stat

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Social Determinants of Health

In recent years, epidemiologists and other researchers concerned with improving the public's health have placed great emphasis on social and behavioral conditions affecting health. These determinants include 1) the social environment—the level and quality of connectedness with friends, family, and community along with socio-economic conditions such as unemployment and job control, income inequality, and race/ethnicity, and the availability of resources to meet basic daily needs; 2) the physical environment—the natural environment such as improved water and sanitation and the built environment—buildings, spaces, transportation systems, and products created or modified by people. The social and physical environmental levels are significantly interconnected; multi-level interventions that change policies and improve the social and physical environments can have a long-lasting impact on outcomes.

Two powerful social determinants of health are income and education. Both relate to health care access. The National Longitudinal Mortality Study cited in the Institute of Medicine's report, *The Future of the Public's Health*, found that mortality was associated with income, education, and occupation. Another 16-year study, also cited in the report, found that median family income in one's zip code of residence was predictive of death from a variety of causes.

There is a strong relationship between social and economic status and risk-related health behaviors such as smoking, physical inactivity, less nutritious diet, and heavy alcohol consumption. After reviewing a number of studies, the Institute of Medicine report concluded that those with more economic and social resources tend to adopt health-promoting behaviors and reduce risky behaviors at a faster rate than those who had fewer resources.

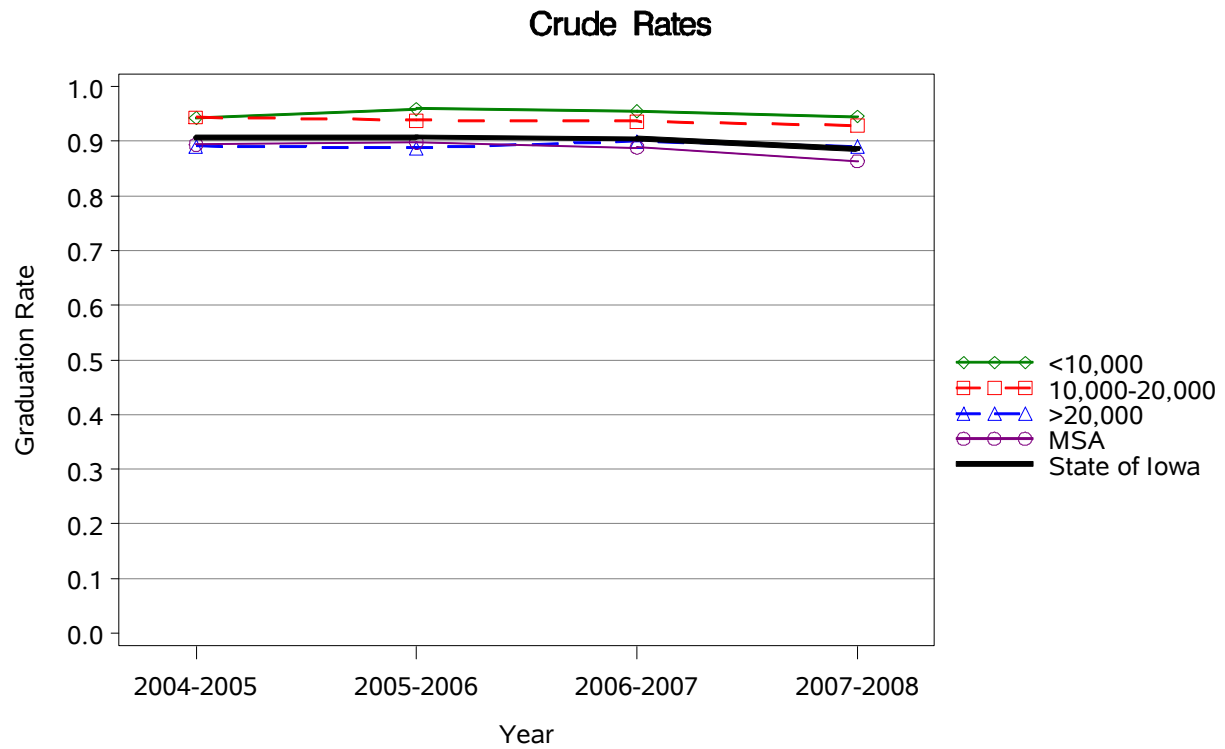
Source: Institute of Medicine, The Future of the Public's Health in the 21st Century, pp. 58-60

High School Graduation Rates 2007-2008

	County	# Diplomas	Crude	County	# Diplomas	Crude
Counties with Average Population < 10,000	Adair	83	0.95	Lucas	103	0.97
	Adams	68	1.00	Monona	128	0.96
	Audubon	83	0.93	Monroe	81	0.91
	Clarke	128	0.94	Osceola	68	0.91
	Davis	103	0.95	Palo Alto	147	0.99
	Decatur	67	0.96	Pocahontas	108	0.96
	Fremont	117	0.94	Ringgold	52	0.91
	Greene	115	0.95	Taylor	75	0.89
	Howard	182	0.92	Van Buren	90	0.96
	Humboldt	131	0.92	Wayne	99	0.94
	Ida	123	0.97	Worth	100	0.94
				Total	2,251	0.95
Counties with Average Population 10,000 – 20,000	Allamakee	218	0.97	Hardin	213	0.93
	Appanoose	162	0.96	Iowa	230	0.97
	Buena Vista	263	0.89	Jefferson	151	0.90
	Butler	146	0.99	Keokuk	149	0.97
	Calhoun	174	0.96	Kossuth	156	0.92
	Cass	210	0.90	Louisa	218	0.85
	Cedar	276	0.90	Lyon	146	0.97
	Cherokee	150	0.96	Mitchell	146	0.99
	Chickasaw	156	0.98	Montgomery	140	0.89
	Clay	210	0.91	O'Brien	200	0.87
	Clayton	207	0.96	Page	213	0.94
	Crawford	254	0.92	Poweshiek	215	0.89
	Delaware	272	0.97	Sac	151	0.99
	Dickinson	217	0.97	Shelby	159	0.94
	Emmet	125	0.94	Tama	159	0.89
	Floyd	199	0.86	Union	136	0.91
	Franklin	164	0.98	Winnebago	204	0.92
	Hamilton	232	0.88	Wright	200	0.96
	Hancock	167	0.94	Total	6,988	0.93
Counties with Average Population > 20,000	Boone	317	0.90	Lee	387	0.84
	Buchanan	227	0.96	Mahaska	211	0.91
	Carroll	221	0.92	Marion	459	0.95
	Cerro Gordo	480	0.91	Marshall	466	0.81
	Clinton	584	0.90	Muscatine	485	0.85
	Des Moines	446	0.81	Plymouth	319	0.96
	Fayette	353	0.93	Sioux	328	0.94
	Henry	247	0.90	Wapello	446	0.86
	Jackson	239	0.94	Webster	390	0.83
	Jasper	444	0.92	Winneshiek	229	0.98
				Total	7,278	0.89
MSA Counties	Benton	301	0.93	Linn	2,278	0.89
	Black Hawk	1,168	0.82	Madison	209	0.95
	Bremer	425	0.98	Mills	183	0.93
	Dallas	713	0.93	Polk	4,083	0.80
	Dubuque	1,025	0.88	Pottawattamie	1,050	0.81
	Grundy	210	0.96	Scott	1,804	0.84
	Guthrie	189	0.97	Story	818	0.95
	Harrison	242	0.96	Warren	638	0.96
	Johnson	1,023	0.94	Washington	254	0.97
	Jones	262	0.93	Woodbury	1,170	0.82
				Total	18,045	0.86
State Total		34,562	0.89			

Source: Iowa Department of Education, Bureau of Planning, Research, Development, and Evaluation, Project EASIER

High School Graduation Rates 2007-2008



Poverty Levels 2007

	County	%	% Margin of Error ¹	County	%	% Margin of Error ¹
Counties with Average Population < 10,000	Adair	11.3	2.4	Lucas	13.9	3.1
	Adams	10.8	2.5	Monona	13.4	2.9
	Audubon	10.2	2.2	Monroe	10.4	2.3
	Clarke	11.4	2.6	Osceola	8.3	2
	Davis	12.9	3	Palo Alto	9.9	2.1
	Decatur	19.3	4	Pocahontas	11.2	2.6
	Fremont	11.4	2.5	Ringgold	14	3.1
	Greene	10.3	2.3	Taylor	11.1	2.3
	Howard	12	2.5	Van Buren	13.3	3
	Humboldt	9.5	2.2	Wayne	15.6	3.4
	Ida	9.4	2.3	Worth	9	2.1
				Total		
Counties with Average Population 10,000 – 20,000	Allamakee	10.2	2.3	Hardin	9.6	2.1
	Appanoose	18.5	4.1	Iowa	6.2	1.4
	Buena Vista	10.6	2.3	Jefferson	12.2	2.7
	Butler	9.7	2	Keokuk	12.1	2.6
	Calhoun	11	2.4	Kossuth	9	1.8
	Cass	13	2.7	Louisa	10.6	2.3
	Cedar	7.4	1.6	Lyon	7	1.6
	Cherokee	8.3	2	Mitchell	9	2
	Chickasaw	8	1.7	Montgomery	11.1	2.5
	Clay	10.2	2.3	O'Brien	8.4	1.9
	Clayton	10.9	2.2	Page	12.2	2.6
	Crawford	11.3	2.4	Poweshiek	10.6	2.3
	Delaware	9.9	2.2	Sac	10.6	2.3
	Dickinson	7.3	1.6	Shelby	9.5	2.1
	Emmet	11	2.5	Tama	10.8	2.2
	Floyd	12.1	2.6	Union	13.3	2.9
	Franklin	10.1	2.3	Winnebago	9.3	2.1
	Hamilton	8.4	1.9	Wright	11.1	2.4
	Hancock	8.4	1.8	Total		
Counties with Average Population > 20,000	Boone	10.7	2	Lee	13.7	2.8
	Buchanan	10.3	2.3	Mahaska	13.5	2.6
	Carroll	8.6	1.7	Marion	10	2
	Cerro Gordo	11.4	2.2	Marshall	14.1	2.3
	Clinton	11.5	2.2	Muscatine	10.7	2.2
	Des Moines	13.1	2.6	Plymouth	6.4	1.4
	Fayette	11.9	2.3	Sioux	7	1.4
	Henry	11.8	2.6	Wapello	17.7	3.3
	Jackson	10.8	2.2	Webster	13.3	2.6
	Jasper	8.8	1.8	Winneshiek	10.4	2.1
				Total		
MSA Counties	Benton	7.2	1.6	Linn	9.9	1.2
	Black Hawk	16.9	2.3	Madison	7.4	1.7
	Bremer	6.8	1.6	Mills	12.6	2.2
	Dallas	5.3	1.1	Polk	9.4	1
	Dubuque	8.8	1.6	Pottawattamie	10.9	2
	Grundy	6	1.4	Scott	11.4	1.6
	Guthrie	9	2	Story	14.4	2.1
	Harrison	10.2	2.2	Warren	6.9	1.6
	Johnson	15.5	1.8	Washington	8.2	1.7
	Jones	10	2.4	Woodbury	14.3	2.3
				Total		
State Total		11	0.3			

¹Based on 90% confidence intervals

Source: U.S. Census Bureau, Small Area Income & Poverty Estimates

Uninsured (Under 65) 2005

Counties with Average Population < 10,000	County	%	% Margin of Error ¹	County	%	% Margin of Error ¹
	Adair	13.9	2.3	Lucas	8.6	1.9
	Adams	12.5	2.4	Monona	11.4	2.3
	Audubon	17.5	3.1	Monroe	9.5	2.0
	Clarke	11.0	2.2	Osceola	12.5	2.5
	Davis	15.9	2.6	Palo Alto	12.2	2.6
	Decatur	13.7	2.6	Pocahontas	14.7	2.6
	Fremont	11.9	2.3	Ringgold	15.3	2.9
	Greene	11.2	2.2	Taylor	15.4	2.8
	Howard	11.0	2.4	Van Buren	13.1	2.6
	Humboldt	10.2	2.0	Wayne	14.0	2.7
	Ida	14.6	2.6	Worth	13.3	2.3
				Total	12.6	
	Counties with Average Population 10,000 – 20,000	Allamakee	17.5	3.0	Hardin	12.2
Appanoose		9.6	1.6	Iowa	12.0	2.2
Buena Vista		16.2	2.8	Jefferson	12.4	2.3
Butler		13.6	2.4	Keokuk	14.0	2.5
Calhoun		13.2	2.5	Kossuth	12.4	2.5
Cass		8.9	1.7	Louisa	15.5	2.6
Cedar		10.8	2.0	Lyon	15.2	2.7
Cherokee		11.4	2.1	Mitchell	11.5	2.1
Chickasaw		12.5	2.4	Montgomery	9.1	1.9
Clay		10.1	2.1	O'Brien	11.0	2.2
Clayton		15.9	2.9	Page	8.0	1.7
Crawford		14.3	2.6	Poweshiek	10.2	2.0
Delaware		12.7	2.4	Sac	15.9	2.8
Dickinson		12.1	2.3	Shelby	11.0	2.1
Emmet		12.3	2.4	Tama	12.4	2.5
Floyd		9.6	2.0	Union	8.7	1.9
Franklin		14.7	2.6	Winnebago	8.4	1.8
Hamilton		10.1	1.8	Wright	12.0	2.2
Hancock		12.8	2.4	Total	12.2	
Counties with Average Population > 20,000	Boone	8.7	1.8	Lee	8.0	1.7
	Buchanan	10.8	2.2	Mahaska	7.7	1.5
	Carroll	9.7	1.9	Marion	8.5	1.7
	Cerro Gordo	8.2	1.7	Marshall	9.9	1.8
	Clinton	7.2	1.6	Muscatine	8.8	1.6
	Des Moines	7.2	1.5	Plymouth	10.8	1.9
	Fayette	10.5	2.1	Sioux	13.9	2.4
	Henry	8.4	1.8	Wapello	9.3	1.6
	Jackson	11.3	2.3	Webster	8.7	1.5
	Jasper	8.4	1.7	Winneshiek	12.5	2.4
				Total	9.1	
	MSA Counties	Benton	10.8	2.1	Linn	9.3
Black Hawk		8.5	1.6	Madison	11.4	2.1
Bremer		9.7	1.8	Mills	9.4	1.8
Dallas		11.1	2.0	Polk	9.1	1.2
Dubuque		8.9	1.8	Pottawattamie	10.0	1.7
Grundy		15.3	2.5	Scott	8.5	1.4
Guthrie		15.5	2.6	Story	16.8	2.6
Harrison		9.5	1.8	Warren	8.7	1.6
Johnson		13.0	2.2	Washington	12.4	2.4
Jones		11.2	2.2	Woodbury	10.5	1.7
				Total	10.0	
State Total		10.4	0.6			

¹Based on 90% confidence intervals

Source: U.S. Census Bureau, Small Area Health Insurance Estimates

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Health Behaviors

The health of individuals and their communities is determined by a variety of factors including biologic, environmental, social, and behavioral influences. This section provides an overview of selected surveys and statistics collected in Iowa to track the effects of these various influences on the health of Iowans. Introductions are provided individually for each of the surveys with links to more detailed information on survey methodology and additional data where available. Information on marriages and dissolutions is included at the end of this section because it characterizes and contrasts the population dynamics that can affect health.

QUESTIONS TO CONSIDER WHEN USING SURVEY RESULTS...

- ✓ What was the method used to conduct the survey, i.e., telephone, mail, personal interview?
- ✓ What was the response rate of those surveyed and what factors might influence who responds and who doesn't?
- ✓ Are the survey respondents representative of and thus generalizable to a particular population?
- ✓ Because a survey provides only estimates based on the sampled population, what are the variability measures of these estimates?
- ✓ Were the survey questions cross-sectional in that they represent attitudes, behaviors, or disease status of different people, or were the same people surveyed repeatedly over time?

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) survey is an ongoing telephone survey that is conducted each year in every state, including Iowa, as well as in the District of Columbia, and in Puerto Rico. It is financially and technically supported by the Centers for Disease Control and Prevention (CDC) and is a scientifically-designed and validated method of collecting information.

The Iowa BRFSS collects health risk behavior information from over 5,000 household telephone surveys in both English and Spanish, and is designed to collect information on nationally agreed upon topics and on additional areas of special interest to Iowa. Because the BRFSS is conducted annually, the prevalence of these behaviors may be followed longitudinally. The risk behaviors of those surveyed (Iowa residents age 18 and over) are major contributions to illness, disability, and premature death.

The goal of the Iowa BRFSS is to provide data to initiate and guide health promotion disease prevention programs. The BRFSS program achieves this goal by:

1. determining state specific prevalence of personal health behaviors related to the leading cause of premature death;
2. developing the capacity of the state health department to conduct credible telephone surveys; and
3. advancing the understanding that health-related behaviors are critical indices of health.

BRFSS KEY AREAS...

- ✓ Health Status
- ✓ Health Care Coverage
- ✓ Physical Inactivity
- ✓ Body Weight
- ✓ Smoking
- ✓ Alcohol Consumption
- ✓ Hypertension
- ✓ Cholesterol Awareness
- ✓ Colorectal Cancer Screening
- ✓ Diabetes
- ✓ Adult Immunizations
- ✓ Injury Control
- ✓ Women's Health

The BRFSS results can help inform health professionals as to health behaviors and beliefs of the general population, and can be used as a measure of the effectiveness of various public health strategies.

Iowa Behavioral Risk Factor Surveillance System 2007-2008

	Definition	Iowa		US Median ¹	
		2007 % (%,%) ²	2008 % (%,%)	2007 %	2008 %
Binge drinking	Men having five or more or women having four or more alcoholic beverages on one or more occasions in the past month.	19.9 (18.5, 21.3)	20.2 (18.6, 21.8)	15.7	15.5
Chronic drinking	Men having an average of greater than two drinks per day or women having an average of greater than one drink per day.	5.5 (4.7, 6.3)	5.4 (4.6, 6.2)	5.2	5.1
Current smoker	All respondents smoking 100 cigarettes in their lifetime and currently smoking every day or some days.	19.8 (18.4, 21.2)	18.8 (17.4, 20.2)	19.7	18.2
Diabetes	All respondents ever being diagnosed with diabetes, excluding gestational diabetes.	6.8 (6.2, 7.4)	7.0 (6.4, 7.6)	8.1	8.2
High blood pressure	All respondents being told by a health professional that they had high blood pressure.	26.8 (25.4, 28.2)	**	27.5	**
Cholesterol	All respondents having their cholesterol checked in the past five years.	72.7 (70.9, 74.5)	**	74.9	**
High cholesterol	All respondents being told by a health professional that they had high cholesterol.	37.8 (36.2, 39.4)	**	37.5	**
No insurance coverage	All respondents who currently did not have any kind of health care coverage.	10.5 (9.1, 11.9)	9.0 (7.8, 10.2)	14.5	14.5
Mammogram	Female respondents age 40 and older having a mammogram in the past two years.	**	76.5 (74.7, 78.3)	**	76.0
Pap smear	Female respondents with a uterine cervix having a pap smear in the past three years.	**	84.0 (82.0, 86.0)	**	82.7
Obesity	All respondents who had a calculated body mass index (BMI) of 30.0 or above.	27.7 (26.1, 29.3)	26.7 (25.1, 28.3)	26.3	26.6
Overweight	All respondents who had a calculated body mass index (BMI) from 25.0 to 29.9, inclusive.	37.0 (35.4, 38.6)	37.6 (36.0, 39.2)	36.7	36.5
Sigmoidoscopy / Colonoscopy	Respondents age 50 and over who ever had a sigmoidoscopy or colonoscopy.	62.6 (60.2, 64.2)	63.8 (62.0, 65.6)	**	61.8
Tested for HIV	Respondents age 18 to 64 who have ever had a HIV test, excluding for blood donations.	28.5 (26.7, 30.3)	29.2 (27.4, 31.0)	38.0	36.7
Asthma	All respondents who currently have asthma.	6.6 (5.8, 7.4)	7.2 (6.3, 8.1)	8.3	8.7
Health Status	All respondents who rate their current health as good, very good, or excellent.	87.6 (86.6, 88.6)	87.5 (86.5, 88.5)	85.1	84.9

*This question was not asked in all states in the given year

¹In the U.S. half of the 50 states fall above this point and half fall below

²95% confidence interval

Source: BRFSS, Centers for Disease Control and Prevention and the Iowa Department of Public Health

Iowa Youth Survey

The 2008 Iowa Youth survey was a joint project among the Iowa Department of Public Health Division of Health Promotion, Prevention and Addictive Behaviors; Iowa Department of Human Rights Division of Criminal & Juvenile Justice Planning; Iowa Governor's Office of Drug Control Policy; Iowa Department of Education; Iowa Workforce Development; and The Higher Plain, Inc.

Survey scope. The 2008 IYS is the 12th in a series of youth surveys that have been completed every three years since 1975. The 1999, 2002, 2005, and 2008 surveys differ from previous years in both the procedures used to implement the survey and the students who were asked to participate. Previous surveys were given to approximately one-third of Iowa's public school districts and a sample of their 6th, 8th, 10th and 12th grade students. Starting with the 1999 IYS, participation was sought from all public school districts and all students in grades 6, 8 and 11, as well as 14-18 year-old students in alternative programs. These changes make it possible to provide youth development-related data for each participating school, as well as for each county in which participating students reside. They also make it more feasible to use IYS results to assess the outcome of community and school youth development programs. The changes do, however, restrict direct comparisons with surveys prior to 1999 to grades 6 and 8, and to the schools that participated in those surveys.

Starting with the 2002 IYS, participation was also sought from all non-public schools in the state, in addition to all of the public school districts. It was believed that by including all Iowa students in the 6th, 8th and 11th grades, the survey results would more accurately reflect the attitudes and perceptions of all Iowa students in those grades, not just those attending public schools. These non-public school data have been included in this report.

LEVEL OF PARTICIPATION...			
Grade	Number Enrolled	Number Completed IYS	Percent Completed IYS
6	37,643	32,264	85.7
8	37,807	32,673	86.4
11	39,603	31,130	78.6

Some survey questionnaires were completed in 347 of Iowa's 362 public school districts (95.9%) and in a minimum of 48 of 184 private schools (26.1%) with some combination of students enrolled in the 6th, 8th and/or 11th grades. A total of 97,741 public and private school

students across the state completed the IYS, with each county represented by at least 200 students. Due to procedural errors in obtaining the survey forms and distributing the forms to the student-participants, the data from certain non-public schools were irretrievably commingled with the public school data in four public school districts, thus it is not possible to calculate the actual number of public school students and non-public school students who completed surveys, or the exact number of private schools that submitted surveys.

Survey content. The 2008 IYS questionnaire includes questions about the students' behaviors and attitudes/beliefs, as well as their perceptions of their peer, family, school and neighborhood/community environments. Prior research has shown that each of these environments plays a significant role in positive youth development. Selection of specific survey questions was based on a combination of: 1) analysis of data collected in previous Iowa Youth Surveys; 2) a literature review of the established youth development models, especially those that enjoy some acceptance in Iowa; and 3) discussion sessions with youth development professionals (community service providers, school district personnel and academicians).

The general content of the questions included in the 2008 IYS is similar to that of previous surveys. Most of the items are relevant to the constructs on which previous IYS were based. All questions and responses from the 2005 IYS were utilized without modification, and several new questions added. Among the new additions were questions eliciting additional, more detailed information on gambling, nutrition, and exercise, as well as information regarding parental involvement in the military, students receiving accommodation under Section 504, students with Individualized Education Plans, and students receiving special education services.

The appropriateness of any comparison between the 2008 IYS to surveys from previous years must be considered on a question-by-question basis. Trend analyses for the most part should be considered exploratory at best. If comparisons are made, the 2005 and 2008 reports may make the state *appear* to be significantly different, for better or worse, from the reports generated by previous surveys. This appearance may be due to differences in question wording between the 2005/2008 reports and all previous reports and the representativeness of the samples rather than to actual changes in Iowa's youth.

Iowa Youth Survey (IYS) 2008

Substance Use Behaviors	Definition	% ¹ 6 th grade	% ¹ 8 th grade	% ¹ 11 th grade	% ² State
Tobacco	Percentage of students who reported smoking cigarettes during the past 30 days.	1	5	19	10
	Percentage of students who reported smoking cigars during the past 30 days.	0	1	11	4
	Percentage of students who reported using smokeless tobacco during the past 30 days.	1	4	16	6
Alcohol	Percentage of students who reported having 1 or more alcoholic drinks during the past 30 days.	5	15	37	19
	Percentage of students who reported having 5 or more alcoholic drinks in a row, within a couple of hours, during the past 30 days.	1	9	27	14
Marijuana	Percentage of students who reported using marijuana during the past 30 days.	0	4	12	6
Inhalants	Percentage of students who reported sniffing glue, breathing the contents of gases or sprays in order to get high during the past 30 days.	2	3	2	2
Methamphetamines	Percentage of students who reported using methamphetamines during the past 30 days.	0	0	1	0
Cocaine	Percentage of students who reported using cocaine during the past 30 days.	0	0	2	0
Amphetamines	Percentage of students who reported using amphetamines (other than methamphetamines) during the past 30 days.	0	0	2	1
Steroid Pills/Shots	Percentage of students who reported taking steroid pills or shots without a doctor's prescription during the past 30 days.	0	1	2	1
Other Illegal Drugs	Percentage of students who reported using any other illegal drug during the past 30 days.	0	1	4	1
Prescription Medications	Percent of students who reported using prescription medications that were not prescribed for them.	2	4	7	5

%¹ Unweighted Percentage%² Weighted Percentage

Source: Iowa Dept. of Public Health, Div. of Health Promotion, Prevention, and Addictive Behaviors

Iowa Youth Survey 2008 (continued)

	Definition		% ¹ 6 th grade	% ¹ 8 th grade	% ¹ 11 th grade	% ² State
Attitudes about self	I am accepting of those different than me (racially, culturally, socio-economically).	Strongly Agree	63	58	55	59
		Agree	32	37	39	36
		Disagree	4	4	3	4
		Strongly Disagree	2	1	2	2
	I can say "no" when someone wants me to do things I know are wrong or dangerous.	Strongly Agree	76	64	56	65
		Agree	19	29	36	28
		Disagree	3	5	6	4
		Strongly Disagree	2	2	2	2
	Violence is the worst way to solve problems	Strongly Agree	61	41	34	45
		Agree	26	35	39	33
		Disagree	8	16	21	15
		Strongly Disagree	6	7	6	6
Attitudes about alcohol	It is against my values to have sex as a teenager	Strongly Agree	69	47	19	44
		Agree	17	27	21	22
		Disagree	8	17	37	21
		Strongly Disagree	6	9	24	13
	It is against my values to use alcohol and drugs as a teenager.	Strongly Agree	81	62	30	57
		Agree	12	23	27	21
		Disagree	3	11	31	16
		Strongly Disagree	4	5	12	7
	Have you ever tried to kill yourself?	Percentage	6	10	13	10
	Thinking of your best friends, how wrong would most of them feel it would be for you to go to a party where kids under 21 were using alcohol?	Very Wrong	80	55	22	52
		Wrong	11	20	16	16
		A Little Wrong	4	12	22	13
		Not Wrong at All	2	9	37	17
		Don't Know	3	3	3	3
Attitudes about school	How wrong would your parents/guardians feel it would be for you to go to a party where kids under 21 were using alcohol?	Very Wrong	93	86	68	82
		Wrong	4	8	17	10
		A Little Wrong	1	3	10	5
		Not Wrong at All	1	2	4	2
		Don't Know	1	1	1	1
	Would you be more or less likely to be popular (respected or cool) with the other students in your school if you drank alcoholic beverages?	A Lot More Popular	4	5	9	6
		More Popular	4	10	25	14
		Less Popular	14	20	10	15
		A Lot Less Popular	53	36	8	32
		Wouldn't Change My Popularity	25	29	48	34
	There are clear rules about what students can and cannot do.	Strongly Agree	63	45	34	47
		Agree	31	44	54	43
		Disagree	4	8	10	7
		Strongly Disagree	2	3	3	2

%¹ Unweighted Percentage%² Weighted Percentage

Source: Iowa Dept. of Public Health, Div. of Health Promotion, Prevention, & Addictive Behaviors

Iowa Youth Survey 2008 (continued)

	Definition		% ¹	% ¹	% ¹	% ²
			6 th grade	8 th grade	11 th grade	State
Attitudes about school (continued)	Students caught drinking, smoking, or using an illegal drug are not allowed to participate in any extracurricular activity for some time period.	Strongly Agree	81	67	51	66
		Agree	13	24	37	25
		Disagree	3	5	7	5
		Strongly Disagree	3	4	4	4
	If I skipped school at least one of my parents/guardians would be notified.	Strongly Agree	68	54	44	55
		Agree	22	35	44	34
		Disagree	5	7	9	7
		Strongly Disagree	4	3	3	4
	Students in my school treat each other with respect.	Strongly Agree	28	14	9	17
		Agree	42	39	41	41
		Disagree	23	33	37	31
		Strongly Disagree	8	14	13	12
	I feel safe at school.	Strongly Agree	50	31	22	34
		Agree	38	50	60	50
		Disagree	8	13	13	11
		Strongly Disagree	4	6	5	5
	There is at least one adult at school who I could go to for help with a problem.	Strongly Agree	68	50	41	53
		Agree	25	35	45	35
		Disagree	4	9	10	8
		Strongly Disagree	3	6	5	5
Attitudes about family	In my home there are clear rules about what I can and cannot do.	Strongly Agree	65	52	42	53
		Agree	29	39	45	38
		Disagree	4	7	10	7
		Strongly Disagree	1	2	3	2
	I have a happy home.	Strongly Agree	61	48	41	50
		Agree	30	38	44	37
		Disagree	6	10	11	9
		Strongly Disagree	3	4	4	4
	There are people living in my home who have a serious alcohol or drug problem.	Strongly Agree	11	8	6	8
		Agree	8	8	9	8
		Disagree	17	20	22	20
		Strongly Disagree	65	63	63	64
	I can get help and support when I need it from someone in my home.	Strongly Agree	72	57	46	58
		Agree	21	31	40	31
		Disagree	3	7	9	7
		Strongly Disagree	3	5	5	4
	A parent/guardian knows where I am and who I am with, especially in the evening and on weekends.	Never	5	5	4	5
		Sometimes	9	15	22	15
		Often	18	26	34	26
		Always	68	54	40	54
Attitudes about community	My neighborhood is a safe place to live.	Strongly Agree	57	46	42	48
		Agree	34	44	50	43
		Disagree	7	7	6	7
		Strongly Disagree	3	3	2	3

%¹ Unweighted Percentage%² Weighted Percentage

Source: Iowa Dept. of Public Health, Div. of Health Promotion, Prevention, and Addictive Behaviors

Iowa Youth Survey 2008 (continued)

Attitudes about community (continued)	Definition		% ¹ 6 th grade	% ¹ 8 th grade	% ¹ 11 th grade	% ² State
	Adults in my neighborhood or community help me when I need help.	Strongly Agree Agree Disagree Strongly Disagree	46 36 12 5	26 45 21 8	12 48 28 11	27 43 21 8
	In your neighborhood or community how difficult do you think it would be for a kid your age to get...					
	...cigarettes	Very hard Hard Easy Very Easy Don't know	51 20 9 5 15	28 26 23 12 11	10 14 35 34 7	29 20 23 17 11
	...alcoholic beverages (beer, wine, liquor).	Very hard Hard Easy Very Easy Don't know	48 20 12 5 14	24 23 27 16 10	8 13 38 35 6	26 19 26 19 10
	...marijuana (pot, grass, hash, bud, weed).	Very hard Hard Easy Very Easy Don't know	67 11 4 3 15	47 21 12 7 13	18 20 30 21 12	43 17 15 11 13
	...methamphetamines (crack, ice).	Very hard Hard Easy Very Easy Don't know	67 11 3 2 17	54 20 7 4 15	33 28 13 7 20	51 20 8 5 17
	...amphetamines other than methamphetamines (like stimulants, uppers, speed).	Very hard Hard Easy Very Easy Don't know	67 11 3 2 17	53 20 7 4 16	33 27 14 7 20	50 19 8 5 17
	... any other illegal drug (cocaine, etc.).	Very hard Hard Easy Very Easy Don't know	67 11 4 3 15	53 19 8 5 14	32 26 15 8 19	50 19 9 5 16
	...a handgun.	Very hard Hard Easy Very Easy Don't know	56 17 7 5 15	41 25 13 7 13	30 27 16 9 18	42 23 12 7 16

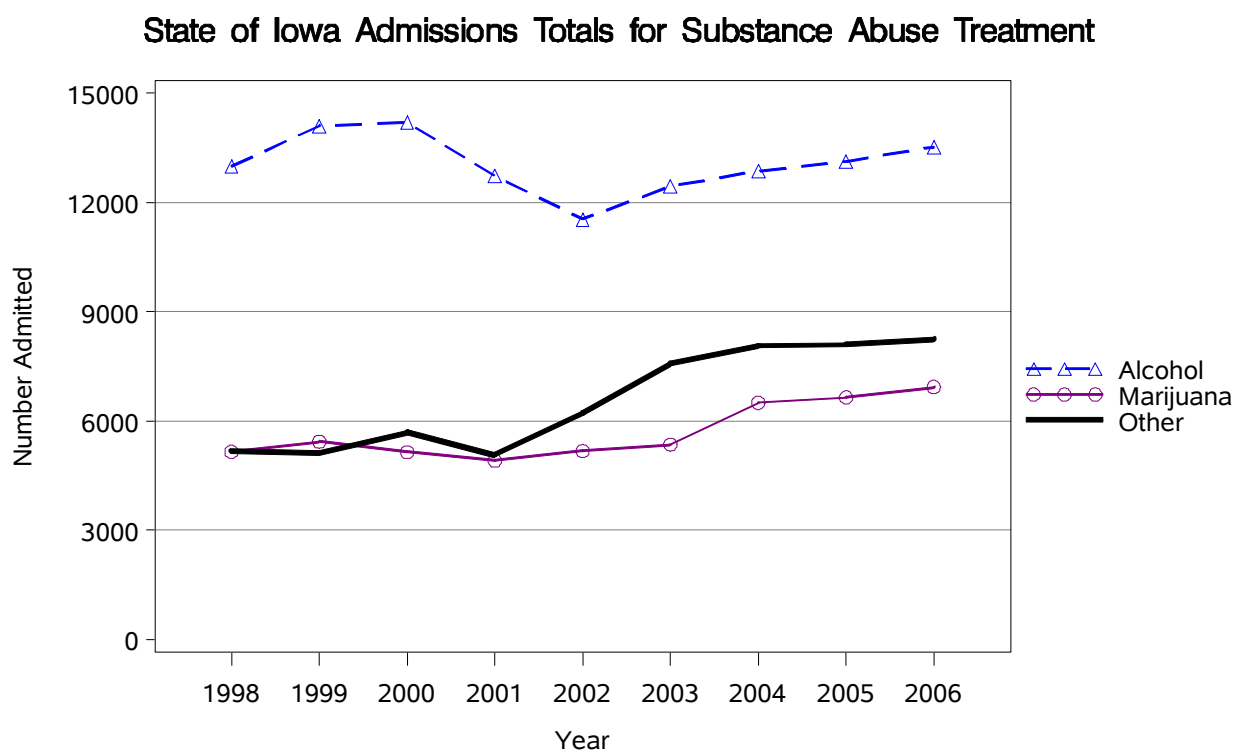
%¹ Unweighted Percentage%² Weighted Percentage

Source: Iowa Dept. of Public Health, Div. of Health Promotion, Prevention, and Addictive Behaviors

Substance Abuse Treatment

Substance abuse treatment is provided to all 99 counties in Iowa using funding from the Alcohol and Drug Abuse and Mental Health Services block grant, state substance abuse appropriations, and Medicaid. Iowa operates under a managed care system which is currently administered by Magellan Behavioral Care of Iowa (MBCI). MBCI contracts with a total of 64 service providers in 22 service areas as represented on the map on the next page. The 64 service providers include 32 who receive funding from both IDPH and Medicaid, and 32 who are funded through Medicaid only. Services are available to all Iowans regardless of their ability to pay or financial status through a sliding-fee schedule.

The reporting period was for calendar years 1998-2006. The numbers reflect those identifying a county of residence in Iowa. Those identifying their residence outside of Iowa were not counted. The count is unduplicated with the following exceptions: a client was counted twice if the primary substance of abuse changed between admissions or if the client's age changed between admissions.

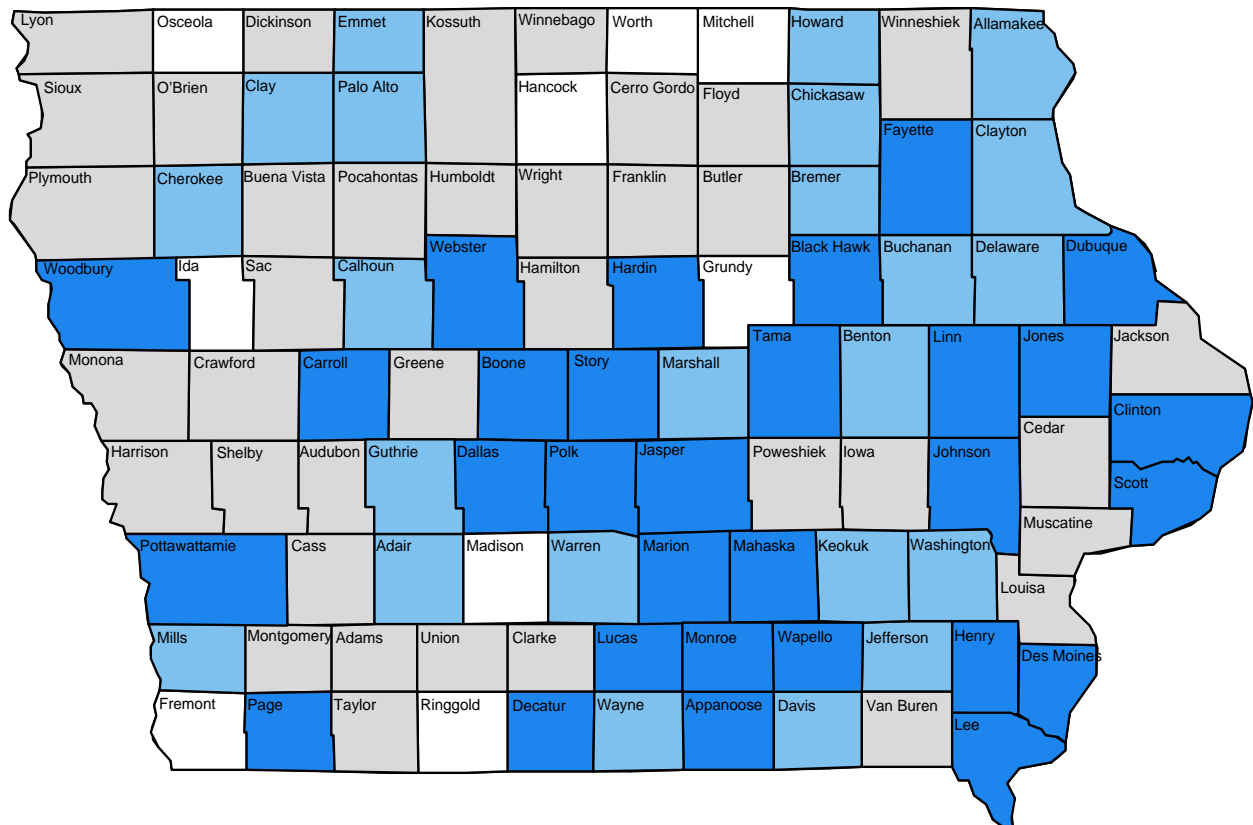


For more information, see www.drugfreeinfo.org or call the Helpline at 1-866-242-4111.

Local Sites for Substance Abuse Treatment

Adel	Corning	Guthrie Center	Mason City	Sergeant Bluff
Albia	Corydon	Hampton	Milford	Sheldon
Algona	Council Bluffs	Harlan	Mitchellville	Shenandoah
Ames	Cresco	Hull	Monroe	Sibley
Anamosa	Creston	Humboldt	Monticello	Sidney
Ankeny	Davenport	Ida Grove	Mt. Pleasant	Sigourney
Atlantic	Decorah	Independence	Muscatine	Sioux City
Audubon	Denison	Indianola	New Hampton	Spencer
Bedford	Des Moines	Iowa City	Newton	Storm Lake
Belle Plain	DeWitt	Iowa Falls	Oakdale	Tipton
Bettendorf	Dubuque	Jefferson	Oelwein	Toledo
Boone	Eagle Grove	Keokuk	Orange City	Vinton
Bloomfield	Eldora	Keosauqua	Orient	Wapello
Burlington	Elkader	Knoxville	Osceola	Washington
Carroll	Emmetsburg	Lamoni	Oskaloosa	Waterloo
Cedar Falls	Estherville	LeMars	Ottumwa	Waukon
Cedar Rapids	Fairfield	Lenox	Pella	Waverly
Centerville	Forest City	Logan	Perry	Webster City
Chariton	Fort Dodge	Manning	Pocahontas	West Burlington
Charles City	Ft. Madison	Manchester	Postville	West Union
Cherokee	Glenwood	Mapleton	Red Oak	Winterset
Clarinda	Greenfield	Maquoketa	Rock Rapids	Woodward
Clinton	Grinnell	Marengo	Rockwell City	
Coralville	Grundy Center	Marshalltown	Sac City	

Sites per County



0
 1
 2
 3 or more

Source: Iowa Department of Public Health, Div. of Promotion, Prevention, and Addictive Behaviors

Marriages 2006-2007

	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)
Counties with Average Population < 10,000	Adair	89	5.8 (79)	Lucas	119	6.3 (62)
	Adams	50	6.1 (70)	Monona	89	4.9 (96)
	Audubon	65	5.3 (89)	Monroe	102	6.7 (43)
	Clarke	115	6.4 (59)	Osceola	71	5.4 (87)
	Davis	125	7.3 (22)	Palo Alto	121	6.4 (56)
	Decatur	105	6.2 (65)	Pocahontas	82	5.3 (88)
	Fremont	103	6.8 (39)	Ringgold	82	8.0 (06)
	Greene	125	6.6 (50)	Taylor	88	6.8 (37)
	Howard	132	6.9 (30)	Van Buren	116	7.6 (15)
	Humboldt	114	5.9 (75)	Wayne	93	7.4 (20)
	Ida	96	6.9 (31)	Worth	66	4.3 (98)
				Total	2,148	6.3
Counties with Average Population 10,000 – 20,000	Allamakee	191	6.6 (48)	Hardin	225	6.4 (55)
	Appanoose	230	8.8 (04)	Iowa	195	6.1 (69)
	Buena Vista	270	6.9 (32)	Jefferson	213	6.9 (34)
	Butler	164	5.6 (85)	Keokuk	122	5.7 (83)
	Calhoun	127	6.3 (61)	Kossuth	224	7.2 (25)
	Cass	214	7.7 (11)	Louisa	105	4.5 (97)
	Cedar	208	5.8 (80)	Lyon	118	5.2 (91)
	Cherokee	142	6.0 (72)	Mitchell	120	5.6 (86)
	Chickasaw	622	25.4 (01)	Montgomery	166	7.5 (16)
	Clay	213	6.4 (60)	O'Brien	171	6.1 (71)
	Clayton	281	7.9 (08)	Page	218	6.8 (36)
	Crawford	187	5.7 (84)	Poweshiek	242	6.5 (53)
	Delaware	239	6.8 (35)	Sac	150	7.2 (24)
	Dickinson	394	11.8 (02)	Shelby	155	6.3 (63)
	Emmet	129	6.2 (67)	Tama	227	6.4 (58)
	Floyd	188	5.8 (81)	Union	233	9.6 (03)
	Franklin	139	6.6 (47)	Winnebago	128	5.8 (77)
	Hamilton	200	6.4 (57)	Wright	103	3.9 (99)
	Hancock	144	6.3 (64)	Total	7,397	7.1
Counties with Average Population > 20,000	Boone	400	7.6 (14)	Lee	577	8.1 (05)
	Buchanan	280	6.7 (42)	Mahaska	305	6.9 (33)
	Carroll	313	7.5 (17)	Marion	518	7.9 (07)
	Cerro Gordo	659	7.5 (18)	Marshall	599	7.7 (13)
	Clinton	688	7.0 (28)	Muscatine	626	7.4 (19)
	Des Moines	547	6.7 (41)	Plymouth	289	5.9 (74)
	Fayette	218	5.3 (90)	Sioux	469	7.3 (23)
	Henry	280	7.0 (29)	Wapello	555	7.8 (10)
	Jackson	268	6.7 (44)	Webster	475	6.1 (68)
	Jasper	418	5.7 (82)	Winneshiek	295	7.1 (26)
				Total	8,779	7.0
MSA Counties	Benton	262	4.9 (94)	Linn	2,534	6.2 (66)
	Black Hawk	1,656	6.5 (52)	Madison	216	7.1 (27)
	Bremer	314	6.6 (46)	Mills	154	5.1 (93)
	Dallas	860	7.7 (12)	Polk	5,423	6.6 (51)
	Dubuque	1,435	7.8 (09)	Pottawattamie	1,206	6.8 (40)
	Grundy	120	4.9 (95)	Scott	2,207	6.8 (38)
	Guthrie	145	6.6 (49)	Story	1,128	6.7 (45)
	Harrison	200	6.5 (54)	Warren	648	7.4 (21)
	Johnson	1,472	5.9 (73)	Washington	247	5.8 (78)
	Jones	210	5.2 (92)	Woodbury	1,194	5.9 (76)
				Total	21,631	6.5
State Total		39,955	6.7			

¹Rates per 1,000 population²Rank among 99 Iowa counties

Source: Iowa Department of Public Health, Vital Statistics

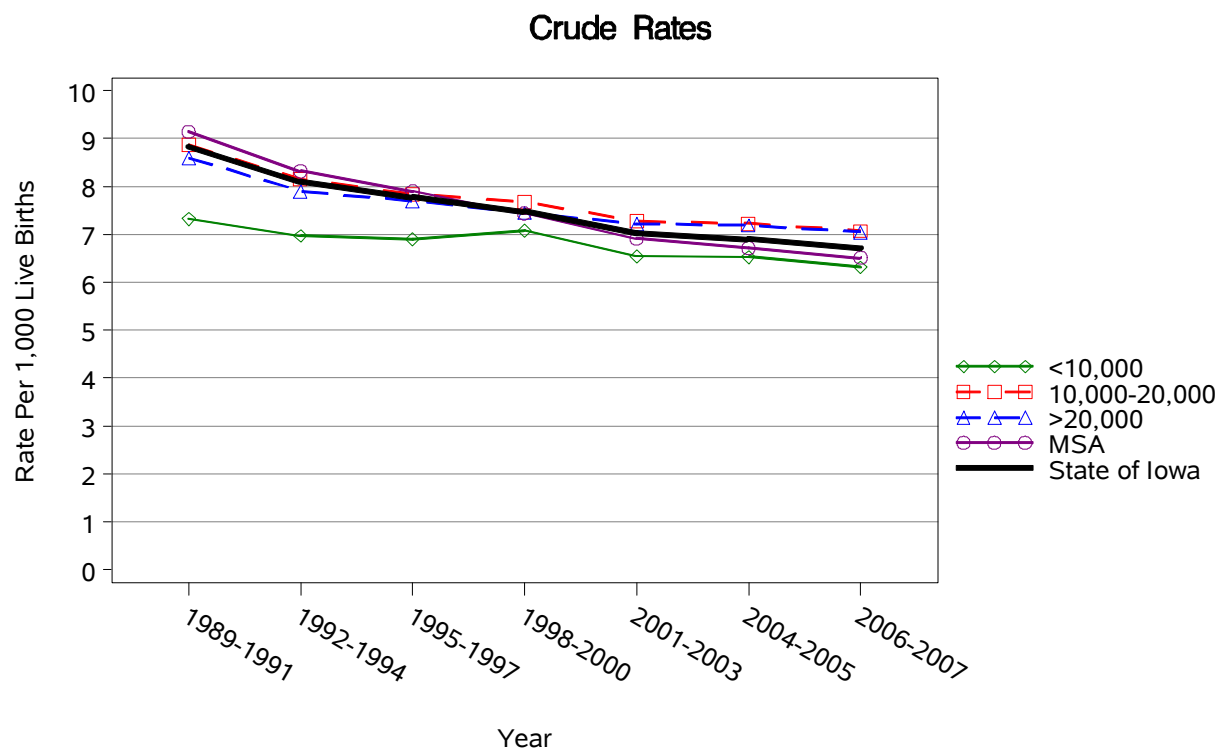
Dissolutions 2006-2007

	Counties with Average Population < 10,000			Counties with Average Population 10,000 – 20,000			Counties with Average Population > 20,000			MSA Counties				
	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)		
Counties with Average Population < 10,000	Adair	45	2.9 (38)	Lucas	59	3.1 (25)	Counties with Average Population 10,000 – 20,000	Hardin	110	3.1 (24)	Counties with Average Population > 20,000	Boone	177	3.4 (11)
	Adams	22	2.7 (48)	Monona	52	2.8 (41)		Iowa	62	1.9 (85)		Buchanan	58	1.4 (96)
	Audubon	39	3.2 (21)	Monroe	47	3.1 (27)		Jefferson	132	4.3 (03)		Carroll	131	3.1 (23)
	Clarke	42	2.3 (72)	Osceola	30	2.3 (73)		Keokuk	52	2.4 (66)		Cerro Gordo	265	3.0 (35)
	Davis	53	3.1 (26)	Palo Alto	50	2.6 (49)		Kossuth	95	3.0 (33)		Clinton	186	1.9 (86)
	Decatur	49	2.9 (40)	Pocahontas	38	2.5 (62)		Louisa	60	2.5 (59)		Des Moines	162	2.0 (84)
	Fremont	49	3.2 (18)	Ringgold	27	2.6 (50)		Lyon	40	1.8 (90)		Fayette	98	2.4 (68)
	Greene	52	2.7 (45)	Taylor	33	2.6 (57)		Mitchell	44	2.0 (83)		Henry	129	3.2 (19)
	Howard	47	2.5 (63)	Van Buren	47	3.1 (29)		Montgomery	94	4.3 (04)		Jackson	122	3.0 (32)
	Humboldt	53	2.7 (44)	Wayne	31	2.5 (64)		O'Brien	86	3.0 (31)		Jasper	90	1.2 (99)
	Ida	50	3.6 (09)	Worth	24	1.6 (93)		Page	106	3.3 (14)				
				Total	939	2.8		Poweshiek	113	3.0 (34)				
								Sac	51	2.4 (65)				
Counties with Average Population 10,000 – 20,000	Allamakee	66	2.3 (76)				Counties with Average Population > 20,000	Shelby	98	4.0 (06)				
	Appanoose	37	1.4 (95)					Tama	85	2.4 (67)				
	Buena Vista	101	2.6 (55)					Union	108	4.5 (02)				
	Butler	53	1.8 (89)					Winnebago	57	2.6 (53)				
	Calhoun	38	1.9 (87)					Wright	59	2.3 (77)				
	Cass	101	3.6 (07)					Total	2,799	2.7				
	Cedar	120	3.3 (13)											
	Cherokee	32	1.4 (97)											
	Chickasaw	58	2.4 (69)											
	Clay	78	2.3 (71)											
	Clayton	73	2.1 (82)											
	Crawford	109	3.3 (16)											
	Delaware	75	2.1 (79)											
Counties with Average Population > 20,000	Dickinson	99	3.0 (36)				MSA Counties	Linn	1,108	2.7 (46)		Benton	121	2.3 (75)
	Emmet	61	2.9 (39)					Madison	108	3.5 (10)		Black Hawk	432	1.7 (91)
	Floyd	73	2.2 (78)					Mills	77	2.5 (60)		Bremer	100	2.1 (80)
	Franklin	48	2.3 (74)					Polk	2,151	2.6 (52)		Dallas	290	2.6 (54)
	Hamilton	96	3.1 (28)					Pottawattamie	757	4.2 (05)		Dubuque	479	2.6 (51)
	Hancock	29	1.3 (98)					Scott	827	2.6 (58)		Grundy	57	2.3 (70)
								Story	312	1.8 (88)		Guthrie	73	3.3 (15)
								Warren	244	2.8 (43)		Harrison	99	3.2 (20)
								Washington	133	3.1 (22)		Johnson	363	1.5 (94)
								Woodbury	623	3.1 (30)		Jones	110	2.7 (47)
								Total	8,464	2.5				
State Total		15,571	2.6											

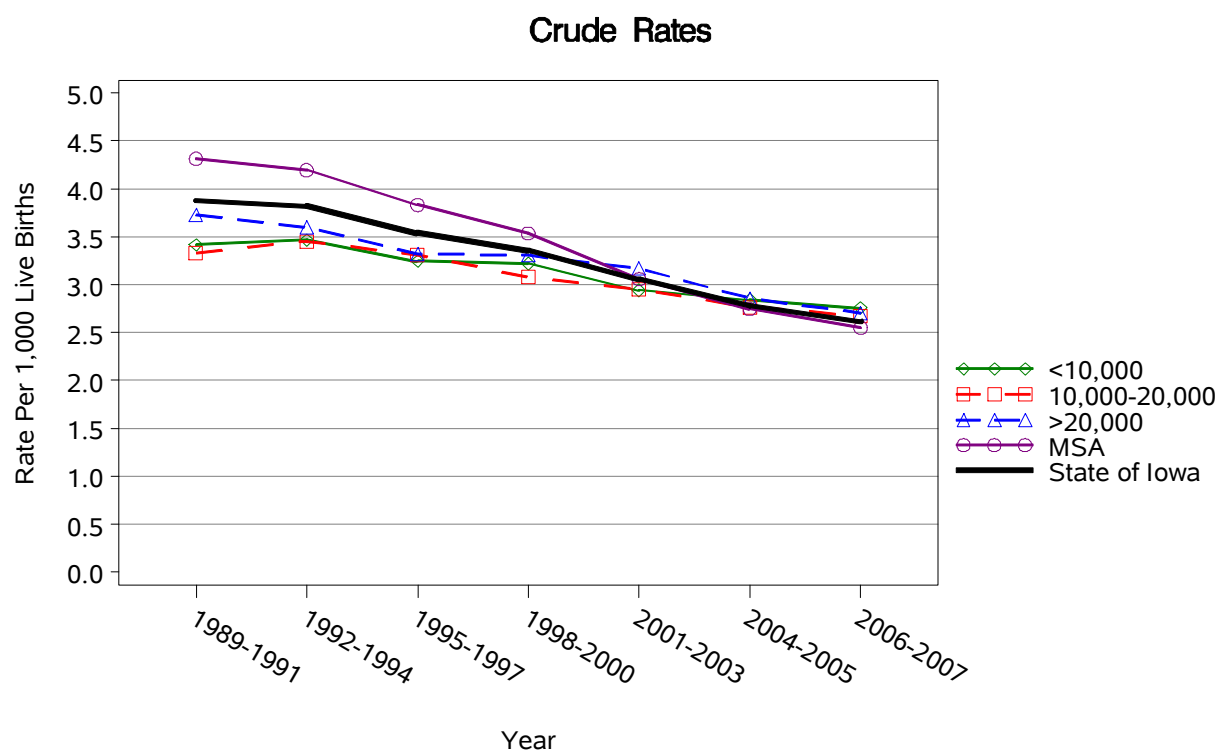
¹Rates per 1,000 population²Rank among 99 Iowa counties

Source: Iowa Department of Public Health, Vital Statistics

Marriages 1989-2007



Dissolutions 1989-2007



Prenatal and Infant Health

Each year families across the United States bring home a healthy baby who has all the potential for a full and productive life. However, some families will suffer the loss of their child soon after birth.

Infant morbidity and mortality are critical indicators of the health of a population. Low birth weight and preterm birth result in a significant loss of life; surviving infants often sustain residual injuries that affect quality of life, and there is substantial financial cost to individuals and to society in caring for these children.

IN AN AVERAGE WEEK IN IOWA¹

- ✓ 781 babies are born.
- ✓ 54 babies are born with low birth weight.
- ✓ 90 babies are born preterm.
- ✓ 4 babies die before their first birthday.

Certain factors have proven to increase the likelihood of delivering a low birth weight or preterm infant, such as (1) multiple births; (2) cigarette smoking during pregnancy; (3) substance abuse immediately prior to conception and during pregnancy (including alcohol abuse); (4) maternal age extremes; and (5) short inter-pregnancy interval.

IN IOWA IN 2006¹

- ✓ 3.5% of all live births were multiple births.
- ✓ 27.7% of all live births were cesarean deliveries
- ✓ About 2.5% of live births was born to a woman receiving late or no prenatal care.

Birth defects rank as the leading cause of mortality in full-term newborn babies in the United States. Iowa's overall birth defect rate is approximately 4.6% of all births. The state of Iowa has taken a leadership role in birth defect surveillance and serves as a model to other states. Iowa has also

partnered with the March of Dimes' Folic Acid education campaign and the Preterm Birth Prevention campaign. Adequate folic acid intake by women of reproductive years has been demonstrated to decrease the risk of neural tube defects in children. Early prenatal care for mothers and health education to women and medical providers allow for a healthier pregnancy and improved birth outcomes.

Interventions need to focus on providing preconceptional health care to women, early and comprehensive prenatal care, and family support that includes promotion of healthy lifestyles.

¹Source: March of Dimes perinatal statistics: www.marchofdimes.com/peristats

¹Rates per 1,000 population
²Rank among 99 Iowa counties

THE 2009 IOWA HEALTH FACT BOOK

Out-of-Wedlock Births 2006-2007

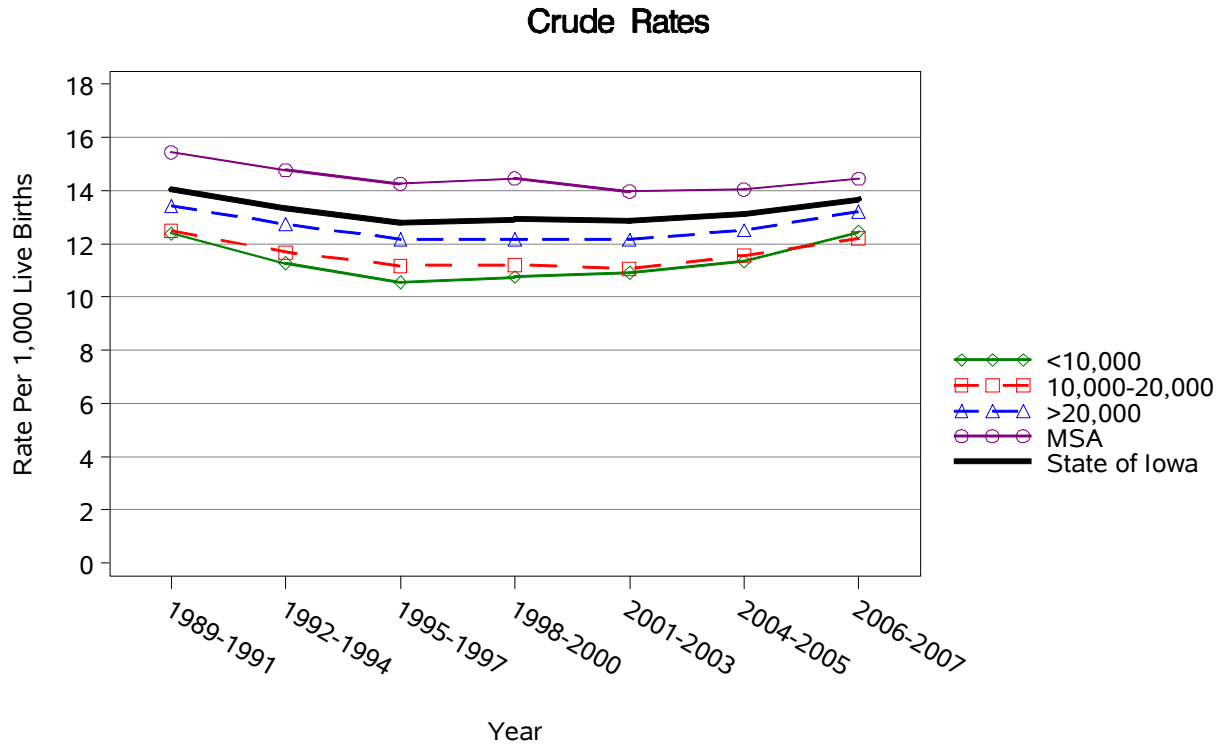
Counties with Average Population < 10,000	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)
	Adair	66	349.2 (39)	Lucas	89	347.7 (40)
	Adams	30	288.5 (62)	Monona	84	383.6 (24)
	Audubon	40	360.4 (35)	Monroe	69	365.1 (33)
	Clarke	103	385.8 (22)	Osceola	36	264.7 (74)
	Davis	60	219.0 (89)	Palo Alto	74	303.3 (54)
	Decatur	66	312.8 (53)	Pocahontas	56	394.4 (17)
	Fremont	72	381.0 (27)	Ringgold	29	243.7 (83)
	Greene	70	313.9 (52)	Taylor	39	272.7 (68)
	Howard	80	299.6 (57)	Van Buren	58	297.4 (58)
	Humboldt	89	385.3 (23)	Wayne	62	344.4 (43)
	Ida	53	280.4 (65)	Worth	50	314.5 (51)
				Total	1,375	324.5
	Counties with Average Population 10,000 – 20,000	Allamakee	120	291.3 (61)	Hardin	135
Appanoose		120	372.7 (29)	Iowa	82	218.7 (90)
Buena Vista		220	400.7 (15)	Jefferson	109	367.0 (31)
Butler		95	255.4 (80)	Keokuk	74	281.4 (64)
Calhoun		73	338.0 (48)	Kossuth	96	272.0 (69)
Cass		140	424.2 (10)	Louisa	123	404.6 (14)
Cedar		91	215.1 (91)	Lyon	53	155.0 (99)
Cherokee		91	355.5 (36)	Mitchell	47	207.0 (95)
Chickasaw		66	213.6 (92)	Montgomery	108	392.7 (18)
Clay		159	379.5 (28)	O'Brien	122	352.6 (37)
Clayton		122	287.7 (63)	Page	135	381.4 (26)
Crawford		189	365.6 (32)	Poweshiek	137	342.5 (45)
Delaware		115	257.3 (78)	Sac	65	280.2 (66)
Dickinson		92	261.4 (76)	Shelby	70	277.8 (67)
Emmet		117	428.6 (09)	Tama	173	395.9 (16)
Floyd		149	344.1 (44)	Union	116	346.3 (42)
Franklin		104	350.2 (38)	Winnebago	73	302.9 (55)
Hamilton		146	387.3 (20)	Wright	165	467.4 (04)
Hancock		77	291.7 (60)	Total	4,169	326.4
Counties with Average Population > 20,000	Boone	174	268.1 (71)	Lee	404	462.8 (05)
	Buchanan	158	241.6 (84)	Mahaska	203	329.0 (50)
	Carroll	153	265.2 (73)	Marion	198	226.8 (87)
	Cerro Gordo	406	386.7 (21)	Marshall	479	389.4 (19)
	Clinton	538	418.4 (11)	Muscatine	515	408.4 (12)
	Des Moines	553	496.0 (02)	Plymouth	168	261.7 (75)
	Fayette	168	363.6 (34)	Sioux	193	188.7 (97)
	Henry	181	383.5 (25)	Wapello	472	467.8 (03)
	Jackson	166	370.5 (30)	Webster	505	515.3 (01)
	Jasper	242	293.3 (59)	Winneshiek	96	227.5 (86)
				Total	5,972	362.6
	MSA Counties	Benton	160	267.1 (72)	Linn	1,887
Black Hawk		1,553	443.0 (07)	Madison	101	254.4 (81)
Bremer		123	211.3 (94)	Mills	95	258.9 (77)
Dallas		350	188.7 (96)	Polk	4,696	339.6 (47)
Dubuque		850	346.8 (41)	Pottawattamie	1,002	407.3 (13)
Grundy		50	180.5 (98)	Scott	2,011	438.1 (08)
Guthrie		66	270.5 (70)	Story	435	213.1 (93)
Harrison		99	256.5 (79)	Warren	256	245.7 (82)
Johnson		722	221.1 (88)	Washington	136	236.9 (85)
Jones		137	301.8 (56)	Woodbury	1,479	445.6 (06)
				Total	16,208	338
State Total		27,724	340.5			

¹Rates per 1,000 live births

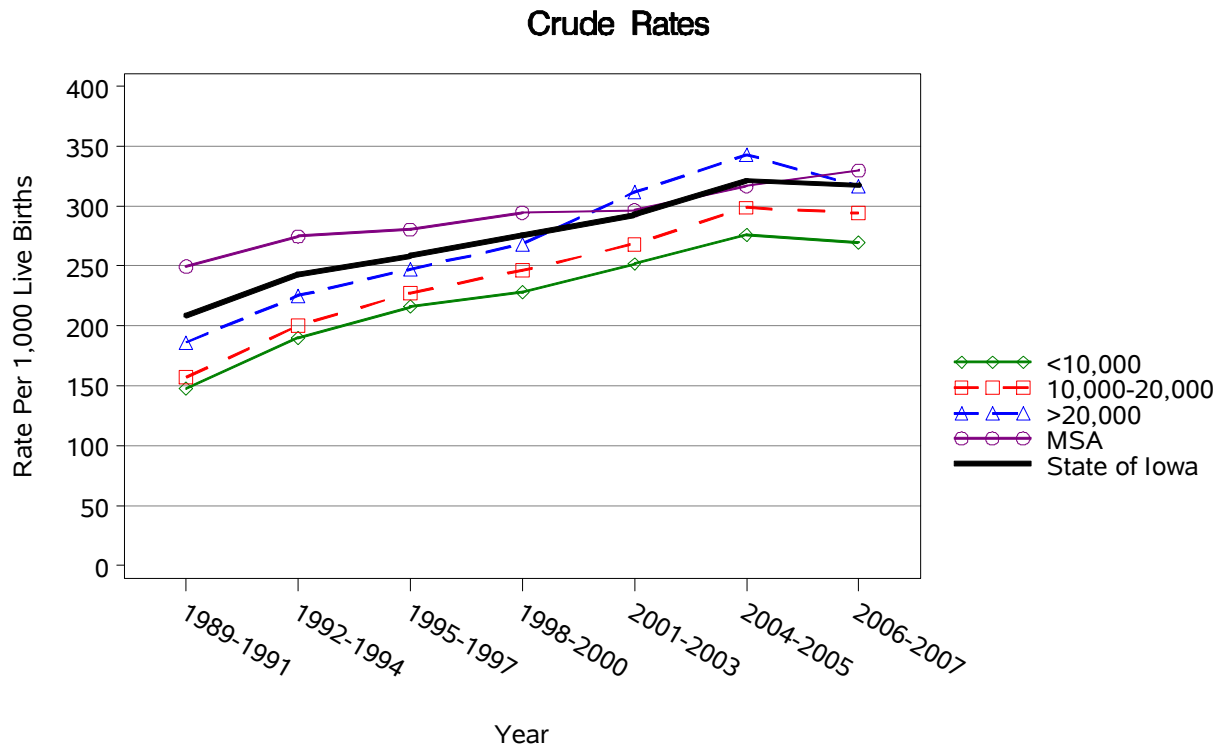
²Rank among 99 Iowa counties

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

Live Births by County Group 1989-2007



Out of Wedlock Births by County Group 1989-2007



Mothers Under Age 20 2006-2007

	Counties with Average Population < 10,000			Counties with Average Population 10,000 – 20,000			Counties with Average Population > 20,000			MSA Counties			
	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)	
Counties with Average Population < 10,000	Adair	17	89.9 (45)	Lucas	33	128.9 (08)	Counties with Average Population 10,000 – 20,000	Boone	54	83.2 (55)	Lee	122	139.7 (03)
	Adams	12	115.4 (22)	Monona	14	63.9 (75)		Buchanan	30	45.9 (90)	Mahaska	76	123.2 (14)
	Audubon	11	99.1 (33)	Monroe	18	95.2 (37)		Carroll	39	67.6 (73)	Marion	70	80.2 (58)
	Clarke	33	123.6 (13)	Osceola	12	88.2 (49)		Cerro Gordo	94	89.5 (47)	Marshall	150	122.0 (15)
	Davis	15	54.7 (84)	Palo Alto	12	49.2 (87)		Clinton	172	133.7 (05)	Muscatine	157	124.5 (12)
	Decatur	24	113.7 (24)	Pocahontas	21	147.9 (01)		Des Moines	142	127.4 (09)	Plymouth	41	63.9 (76)
	Fremont	15	79.4 (61)	Ringgold	14	117.6 (20)		Fayette	42	90.9 (43)	Sioux	59	57.7 (81)
	Greene	14	62.8 (77)	Taylor	17	118.9 (19)		Henry	45	95.3 (36)	Wapello	142	140.7 (02)
	Howard	22	82.4 (56)	Van Buren	18	92.3 (42)		Jackson	46	102.7 (32)	Webster	106	108.2 (28)
	Humboldt	22	95.2 (37)	Wayne	25	138.9 (04)		Jasper	67	81.2 (57)	Winneshiek	18	42.7 (93)
	Ida	9	47.6 (89)	Worth	14	88.1 (50)					Total	1,672	101.5
				Total	392	92.5							
Counties with Average Population 10,000 – 20,000	Allamakee	40	97.1 (35)	Hardin	41	103.5 (31)	Counties with Average Population > 20,000	Benton	39	65.1 (74)	Linn	411	71.9 (66)
	Appanoose	43	133.5 (06)	Iowa	26	69.3 (70)		Black Hawk	324	92.4 (41)	Madison	28	70.5 (68)
	Buena Vista	66	120.2 (18)	Jefferson	36	121.2 (17)		Bremer	23	39.5 (96)	Mills	28	76.3 (63)
	Butler	20	53.8 (86)	Keokuk	11	41.8 (94)		Dallas	89	48.0 (88)	Polk	1,188	85.9 (51)
	Calhoun	18	83.3 (54)	Kossuth	19	53.8 (85)		Dubuque	196	80.0 (60)	Pottawattamie	283	115.0 (23)
	Cass	30	90.9 (43)	Louisa	38	125.0 (10)		Grundy	10	36.1 (97)	Scott	508	110.7 (27)
	Cedar	24	56.7 (83)	Lyon	10	29.2 (98)		Guthrie	7	28.7 (99)	Story	92	45.1 (91)
	Cherokee	29	113.3 (25)	Mitchell	10	44.1 (92)		Harrison	22	57.0 (82)	Warren	78	74.9 (65)
	Chickasaw	19	61.5 (78)	Montgomery	23	83.6 (53)		Johnson	136	41.7 (95)	Washington	46	80.1 (59)
	Clay	29	69.2 (71)	O'Brien	31	89.6 (46)		Jones	34	74.9 (64)	Woodbury	368	110.9 (26)
	Clayton	26	61.3 (79)	Page	43	121.5 (16)					Total	3,910	81.5
	Crawford	46	89.0 (48)	Poweshiek	28	70.0 (69)							
	Delaware	32	71.6 (67)	Sac	16	69.0 (72)							
	Dickinson	33	93.8 (40)	Shelby	15	59.5 (80)							
	Emmet	34	124.5 (11)	Tama	47	107.6 (30)							
	Floyd	41	94.7 (39)	Union	26	77.6 (62)							
	Franklin	25	84.2 (52)	Winnebago	26	107.9 (29)							
	Hamilton	37	98.1 (34)	Wright	46	130.3 (07)							
	Hancock	31	117.4 (21)	Total	1,115	87.3							
Counties with Average Population > 20,000							MSA Counties						

¹Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

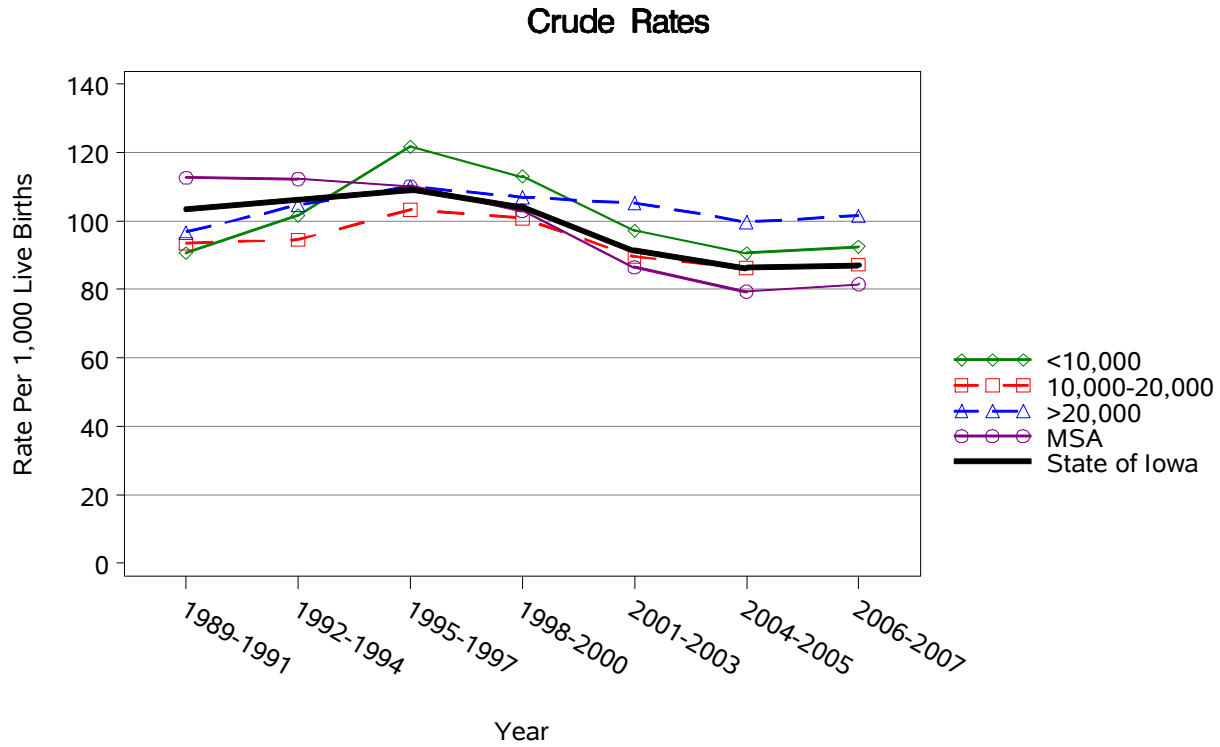
Low Birth Weight (<2500 Grams) 2006-2007

Counties with Average Population < 10,000	County	#	Crude ¹	County	#	Crude ¹	
	Adair	13	68.8	Lucas	22	85.9	
	Adams	7	67.3	Monona	13	59.4	
	Audubon	9	81.1	Monroe	15	79.4	
	Clarke	25	93.6	Osceola	*	*	
	Davis	11	40.1	Palo Alto	19	77.9	
	Decatur	14	66.4	Pocahontas	7	49.3	
	Fremont	9	47.6	Ringgold	8	67.2	
	Greene	18	80.7	Taylor	*	*	
	Howard	16	59.9	Van Buren	15	76.9	
	Humboldt	15	64.9	Wayne	18	100	
	Ida	14	74.1	Worth	*	*	
				Total	279	65.8	
	Counties with Average Population 10,000 – 20,000	Allamakee	23	55.8	Hardin	22	55.6
Appanoose		26	80.7	Iowa	15	40	
Buena Vista		34	61.9	Jefferson	12	40.4	
Butler		21	56.5	Keokuk	24	91.3	
Calhoun		11	50.9	Kossuth	27	76.5	
Cass		22	66.7	Louisa	28	92.1	
Cedar		35	82.7	Lyon	22	64.3	
Cherokee		19	74.2	Mitchell	12	52.9	
Chickasaw		21	68	Montgomery	19	69.1	
Clay		27	64.4	O'Brien	18	52	
Clayton		29	68.4	Page	30	84.7	
Crawford		27	52.2	Poweshiek	26	65	
Delaware		26	58.2	Sac	11	47.4	
Dickinson		23	65.3	Shelby	12	47.6	
Emmet		26	95.2	Tama	33	75.5	
Floyd		22	50.8	Union	16	47.8	
Franklin		17	57.2	Winnebago	21	87.1	
Hamilton		30	79.6	Wright	17	48.2	
Hancock		10	37.9	Total	814	63.7	
Counties with Average Population > 20,000	Boone	33	50.8	Lee	68	77.9	
	Buchanan	32	48.9	Mahaska	48	77.8	
	Carroll	28	48.5	Marion	61	69.9	
	Cerro Gordo	61	58.1	Marshall	94	76.4	
	Clinton	101	78.5	Muscatine	90	71.4	
	Des Moines	97	87	Plymouth	36	56.1	
	Fayette	31	67.1	Sioux	49	47.9	
	Henry	25	53	Wapello	71	70.4	
	Jackson	29	64.7	Webster	62	63.3	
	Jasper	78	94.5	Winneshiek	27	64	
				Total	1,121	68.1	
	MSA Counties	Benton	37	61.8	Linn	403	70.5
		Black Hawk	272	77.6	Madison	23	57.9
Bremer		47	80.8	Mills	34	92.6	
Dallas		119	64.2	Polk	1003	72.5	
Dubuque		139	56.7	Pottawattamie	193	78.5	
Grundy		25	90.3	Scott	333	72.5	
Guthrie		11	45.1	Story	117	57.3	
Harrison		32	82.9	Warren	78	74.9	
Johnson		228	69.8	Washington	44	76.7	
Jones		34	74.9	Woodbury	229	69	
				Total	3,401	70.9	
State Total		5,615	69				

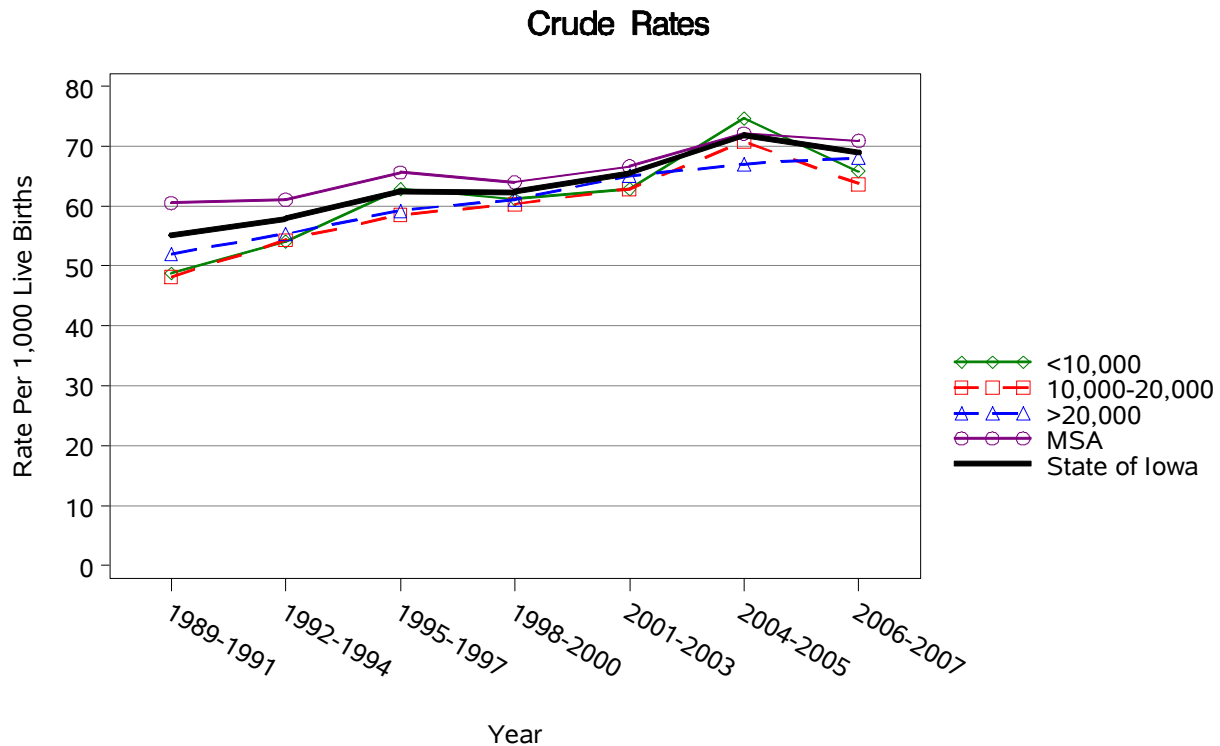
¹Rates per 1,000 live births

 Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates
 * represents a count less than 5

Mothers Under Age 20 by County Group 1989-2007



Low Birth Weight (<2500 grams) by County Group 1989-2007



Mothers Who Began Prenatal Care in First Trimester 2006

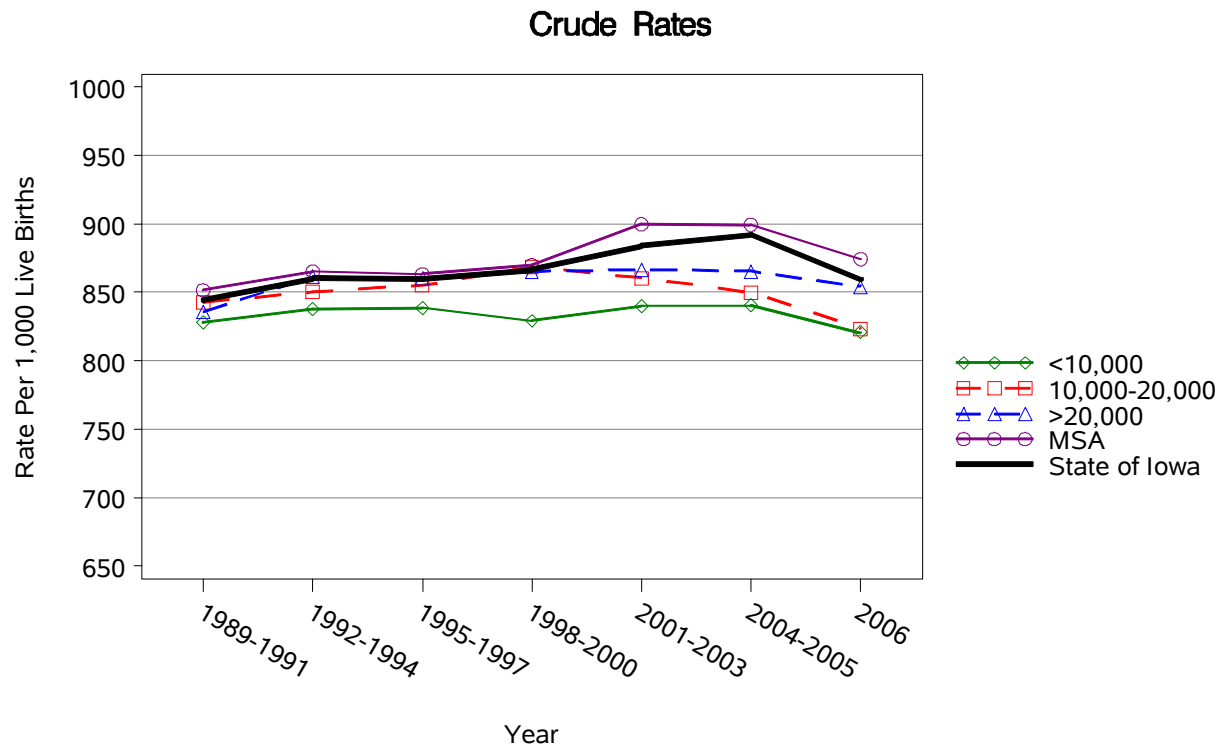
Counties with Average Population < 10,000	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)
	Adair	86	886.6 (40)	Lucas	99	792.0 (79)
	Adams	54	843.8 (62)	Monona	110	916.7 (09)
	Audubon	54	947.4 (02)	Monroe	84	875.0 (42)
	Clarke	107	849.2 (56)	Osceola	62	885.7 (41)
	Davis	97	702.9 (92)	Palo Alto	113	896.8 (24)
	Decatur	74	762.9 (85)	Pocahontas	59	867.6 (47)
	Fremont	60	740.7 (87)	Ringgold	43	728.8 (89)
	Greene	106	828.1 (70)	Taylor	67	848.1 (57)
	Howard	96	755.9 (86)	Van Buren	63	707.9 (91)
	Humboldt	104	832.0 (68)	Wayne	69	784.1 (81)
	Ida	89	967.4 (01)	Worth	59	686.0 (94)
				Total	1,755	820.9
	Counties with Average Population 10,000 – 20,000	Allamakee	159	768.1 (83)	Hardin	170
Appanoose		128	831.2 (69)	Iowa	195	946.6 (03)
Buena Vista		210	807.7 (75)	Jefferson	115	809.9 (74)
Butler		152	894.1 (29)	Keokuk	129	928.1 (06)
Calhoun		96	888.9 (34)	Kossuth	142	855.4 (53)
Cass		125	786.2 (80)	Louisa	131	891.2 (32)
Cedar		181	891.6 (31)	Lyon	151	862.9 (51)
Cherokee		106	890.8 (33)	Mitchell	73	613.4 (98)
Chickasaw		124	794.9 (78)	Montgomery	115	839.4 (65)
Clay		173	843.9 (61)	O'Brien	143	841.2 (63)
Clayton		181	800.9 (77)	Page	150	847.5 (59)
Crawford		195	783.1 (82)	Poweshiek	175	935.8 (04)
Delaware		192	888.9 (34)	Sac	98	823.5 (71)
Dickinson		155	896.0 (27)	Shelby	110	909.1 (18)
Emmet		104	712.3 (90)	Tama	193	854.0 (54)
Floyd		142	645.5 (96)	Union	148	870.6 (45)
Franklin		84	677.4 (95)	Winnebago	105	739.4 (88)
Hamilton		156	847.8 (58)	Wright	123	698.9 (93)
Hancock		79	603.1 (99)	Total	5,208	823.4
Counties with Average Population > 20,000	Boone	301	914.9 (12)	Lee	403	887.7 (38)
	Buchanan	286	841.2 (63)	Mahaska	293	909.9 (17)
	Carroll	276	913.9 (14)	Marion	378	895.7 (28)
	Cerro Gordo	316	630.7 (97)	Marshall	477	764.4 (84)
	Clinton	590	903.5 (21)	Muscatine	568	897.3 (23)
	Des Moines	482	865.4 (49)	Plymouth	281	918.3 (08)
	Fayette	201	873.9 (44)	Sioux	445	852.5 (55)
	Henry	196	886.9 (39)	Wapello	404	814.5 (73)
	Jackson	207	903.9 (20)	Webster	391	806.2 (76)
	Jasper	361	898.0 (22)	Winneshiek	164	863.2 (50)
				Total	7,020	854.2
	MSA Counties	Benton	289	932.3 (05)	Linn	2548
Black Hawk		1585	892.5 (30)	Madison	187	912.2 (15)
Bremer		272	915.8 (10)	Mills	159	888.3 (36)
Dallas		817	914.9 (12)	Polk	5915	855.9 (52)
Dubuque		1056	874.2 (43)	Pottawattamie	1023	833.7 (66)
Grundy		125	905.8 (19)	Scott	1836	817.1 (72)
Guthrie		106	868.9 (46)	Story	919	919.9 (07)
Harrison		148	845.7 (60)	Warren	469	910.7 (16)
Johnson		1478	915.2 (11)	Washington	263	832.3 (67)
Jones		190	896.2 (26)	Woodbury	1521	896.3 (25)
				Total	20,906	874.3
State Total		34,889	859.5			

¹Rates per 1,000 live births

²Rank among 99 Iowa counties

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

Mothers Who Began Prenatal Care in First Trimester by County Group 1989-2006



¹Rates per 1,000 live births
²Rank among 99 Iowa counties

48

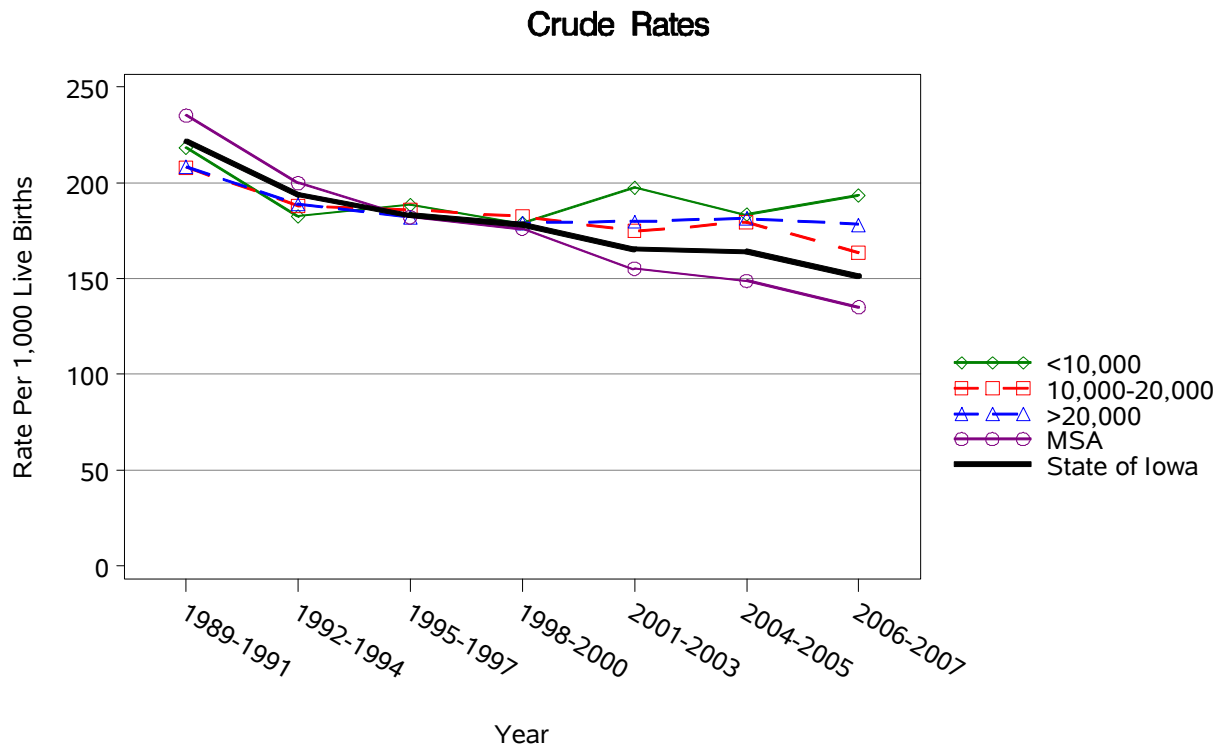
Mothers Who Drank During Pregnancy 2006

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Lucas	*	*
	Adams	*	*	Monona	*	*
	Audubon	*	*	Monroe	*	*
	Clarke	*	*	Osceola	*	*
	Davis	*	*	Palo Alto	*	*
	Decatur	*	*	Pocahontas	*	*
	Fremont	*	*	Ringgold	*	*
	Greene	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Humboldt	*	*	Wayne	*	*
	Ida	*	*	Worth	*	*
				Total	10	4.7
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Iowa	*	*
	Buena Vista	5	19.2	Jefferson	*	*
	Butler	*	*	Keokuk	*	*
	Calhoun	*	*	Kossuth	*	*
	Cass	*	*	Louisa	*	*
	Cedar	*	*	Lyon	*	*
	Cherokee	*	*	Mitchell	*	*
	Chickasaw	*	*	Montgomery	*	*
	Clay	*	*	O'Brien	*	*
	Clayton	*	*	Page	*	*
	Crawford	*	*	Poweshiek	*	*
	Delaware	*	*	Sac	*	*
	Dickinson	*	*	Shelby	*	*
	Emmet	*	*	Tama	*	*
	Floyd	*	*	Union	*	*
	Franklin	*	*	Winnebago	*	*
	Hamilton	*	*	Wright	*	*
	Hancock	*	*	Total	38	6
Counties with Average Population > 20,000	Boone	*	*	Lee	*	*
	Buchanan	*	*	Mahaska	*	*
	Carroll	*	*	Marion	*	*
	Cerro Gordo	*	*	Marshall	*	*
	Clinton	*	*	Muscatine	*	*
	Des Moines	*	*	Plymouth	*	*
	Fayette	*	*	Sioux	*	*
	Henry	*	*	Wapello	*	*
	Jackson	*	*	Webster	6	12.4
	Jasper	*	*	Winneshiek	*	*
				Total	40	4.9
MSA Counties	Benton	*	*	Linn	14	4.9
	Black Hawk	5	2.8	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	*	*	Polk	66	9.5
	Dubuque	11	9.1	Pottawattamie	11	9
	Grundy	*	*	Scott	16	7.1
	Guthrie	*	*	Story	8	8
	Harrison	*	*	Warren	*	*
	Johnson	*	*	Washington	*	*
	Jones	*	*	Woodbury	7	4.1
				Total	163	6.8
State Total		251	6.2			

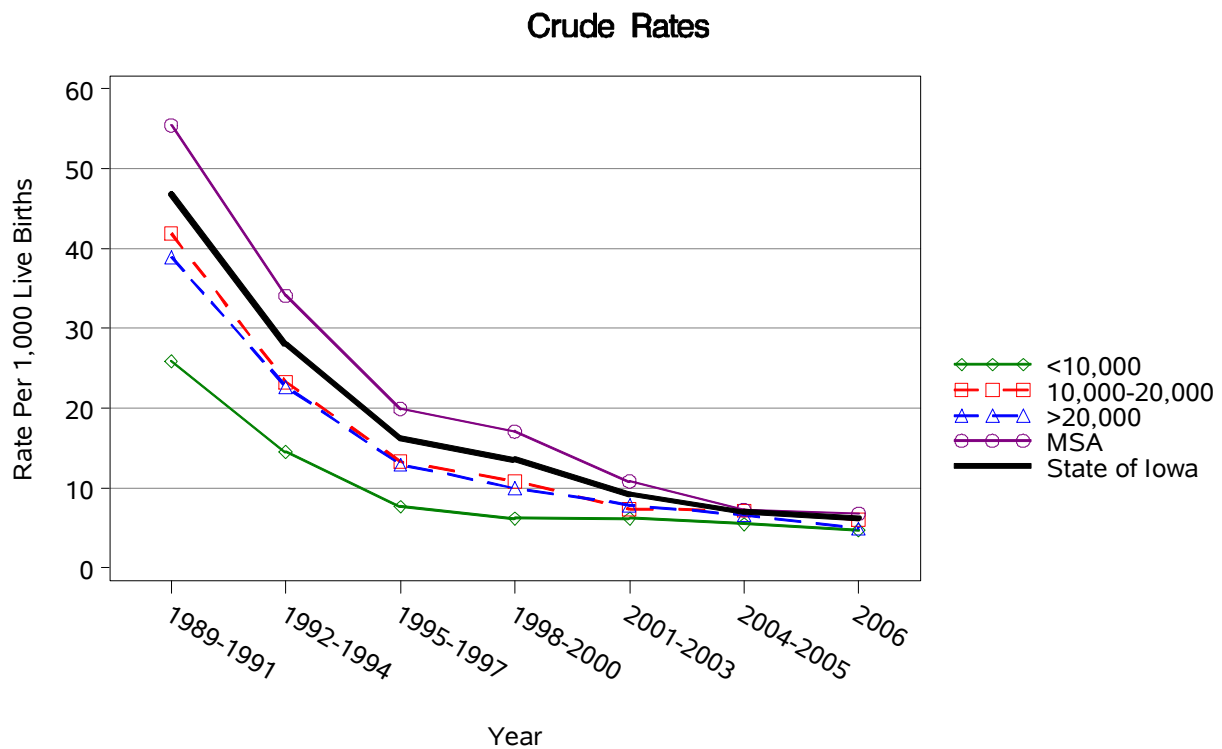
¹Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates
* represents a count less than 5

Mothers Who Smoked During Pregnancy by County Group 1989-2007



Mothers Who Drank During Pregnancy by County Group 1989-2006



Fetal Deaths 2006-2007

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Lucas	*	*
	Adams	*	*	Monona	*	*
	Audubon	*	*	Monroe	*	*
	Clarke	*	*	Osceola	*	*
	Davis	*	*	Palo Alto	*	*
	Decatur	*	*	Pocahontas	*	*
	Fremont	*	*	Ringgold	*	*
	Greene	*	*	Taylor	*	*
	Howard	*	*	Van Buren	5	25.6
	Humboldt	*	*	Wayne	*	*
	Ida	*	*	Worth	*	*
				Total	21	5
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Iowa	*	*
	Buena Vista	6	10.9	Jefferson	*	*
	Butler	*	*	Keokuk	*	*
	Calhoun	*	*	Kossuth	*	*
	Cass	*	*	Louisa	*	*
	Cedar	*	*	Lyon	*	*
	Cherokee	*	*	Mitchell	*	*
	Chickasaw	*	*	Montgomery	*	*
	Clay	*	*	O'Brien	*	*
	Clayton	*	*	Page	*	*
	Crawford	*	*	Poweshiek	*	*
	Delaware	*	*	Sac	*	*
	Dickinson	*	*	Shelby	*	*
	Emmet	*	*	Tama	*	*
	Floyd	*	*	Union	*	*
	Franklin	*	*	Winnebago	*	*
	Hamilton	*	*	Wright	*	*
	Hancock	*	*	Total	60	4.7
Counties with Average Population > 20,000	Boone	7	10.8	Lee	6	6.9
	Buchanan	5	7.6	Mahaska	7	11.3
	Carroll	*	*	Marion	9	10.3
	Cerro Gordo	13	12.4	Marshall	5	4.1
	Clinton	6	4.7	Muscatine	*	*
	Des Moines	11	9.9	Plymouth	8	12.5
	Fayette	0	0	Sioux	*	*
	Henry	*	*	Wapello	8	7.9
	Jackson	*	*	Webster	*	*
	Jasper	8	9.7	Winneshiek	*	*
				Total	105	6.4
MSA Counties	Benton	*	*	Linn	34	6
	Black Hawk	19	5.4	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	8	4.3	Polk	85	6.1
	Dubuque	12	4.9	Pottawattamie	10	4.1
	Grundy	*	*	Scott	22	4.8
	Guthrie	*	*	Story	8	3.9
	Harrison	*	*	Warren	5	4.8
	Johnson	32	9.8	Washington	*	*
	Jones	5	11	Woodbury	17	5.1
				Total	265	5.5
State Total		451	5.5			

¹Rates per 1,000 live births

 Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates
 * represents a count less than 5

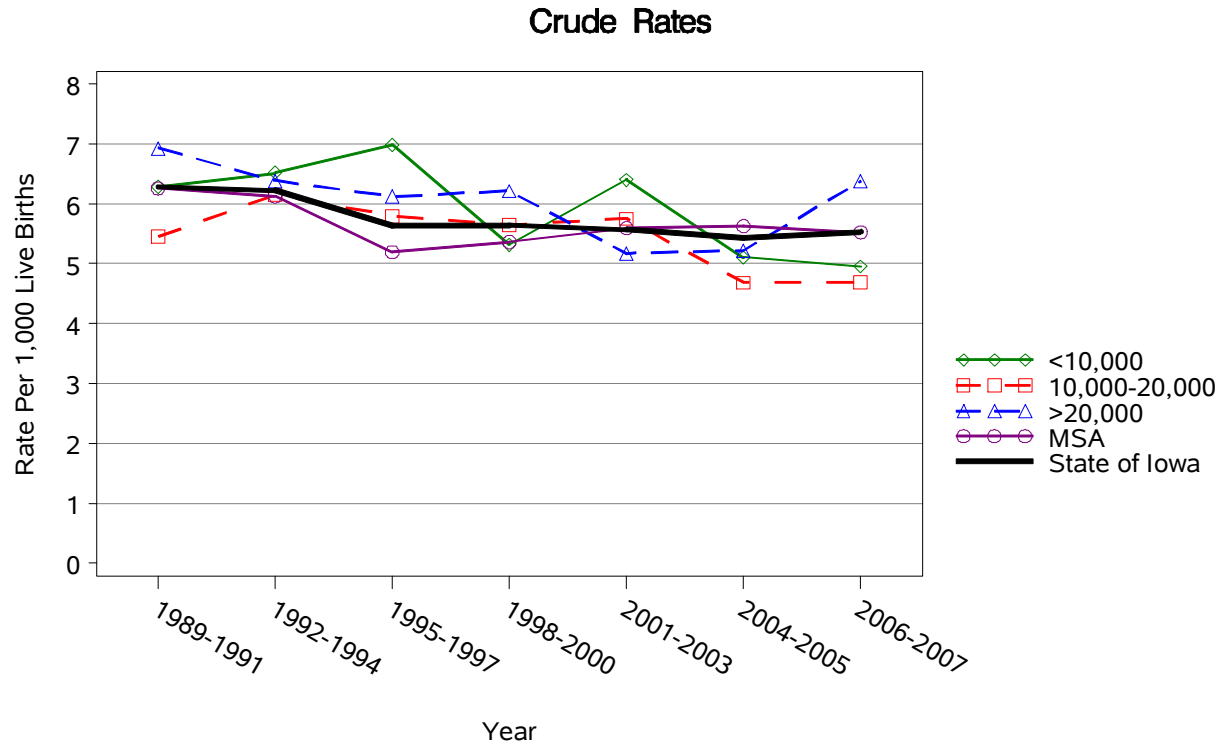
Neonatal Deaths 2006-2007

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Lucas	*	*
	Adams	*	*	Monona	*	*
	Audubon	*	*	Monroe	*	*
	Clarke	*	*	Osceola	*	*
	Davis	*	*	Palo Alto	*	*
	Decatur	*	*	Pocahontas	*	*
	Fremont	*	*	Ringgold	*	*
	Greene	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Humboldt	*	*	Wayne	*	*
	Ida	*	*	Worth	*	*
				Total	15	3.5
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Iowa	*	*
	Buena Vista	*	*	Jefferson	*	*
	Butler	*	*	Keokuk	*	*
	Calhoun	*	*	Kossuth	*	*
	Cass	*	*	Louisa	*	*
	Cedar	*	*	Lyon	*	*
	Cherokee	*	*	Mitchell	*	*
	Chickasaw	*	*	Montgomery	*	*
	Clay	*	*	O'Brien	*	*
	Clayton	*	*	Page	*	*
	Crawford	*	*	Poweshiek	*	*
	Delaware	*	*	Sac	*	*
	Dickinson	*	*	Shelby	*	*
	Emmet	5	18.3	Tama	*	*
	Floyd	*	*	Union	*	*
	Franklin	*	*	Winnebago	*	*
	Hamilton	*	*	Wright	*	*
	Hancock	*	*	Total	32	2.5
Counties with Average Population > 20,000	Boone	*	*	Lee	*	*
	Buchanan	*	*	Mahaska	*	*
	Carroll	*	*	Marion	*	*
	Cerro Gordo	*	*	Marshall	*	*
	Clinton	10	7.8	Muscatine	*	*
	Des Moines	5	4.5	Plymouth	*	*
	Fayette	*	*	Sioux	9	8.8
	Henry	*	*	Wapello	*	*
	Jackson	*	*	Webster	*	*
	Jasper	*	*	Winneshiek	*	*
				Total	58	3.5
MSA Counties	Benton	*	*	Linn	20	3.5
	Black Hawk	9	2.6	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	*	*	Polk	51	3.7
	Dubuque	7	2.9	Pottawattamie	15	6.1
	Grundy	*	*	Scott	12	2.6
	Guthrie	*	*	Story	6	2.9
	Harrison	*	*	Warren	*	*
	Johnson	15	4.6	Washington	*	*
	Jones	*	*	Woodbury	12	3.6
				Total	161	3.4
State Total		266	3.3			

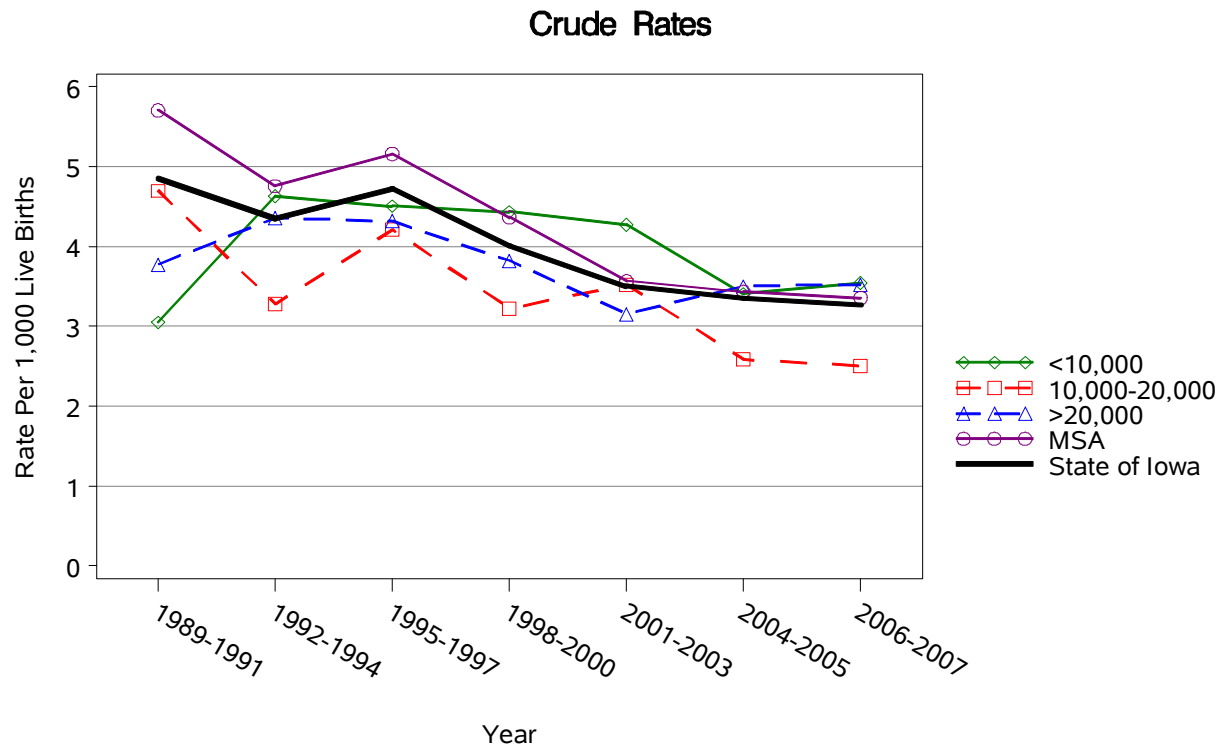
¹Rates per 1,000 live births

 Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates
 * represents a count less than 5

Fetal Deaths by County Group 1989-2007



Neonatal Deaths by County Group 1989-2007



Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates
* represents a count less than 5

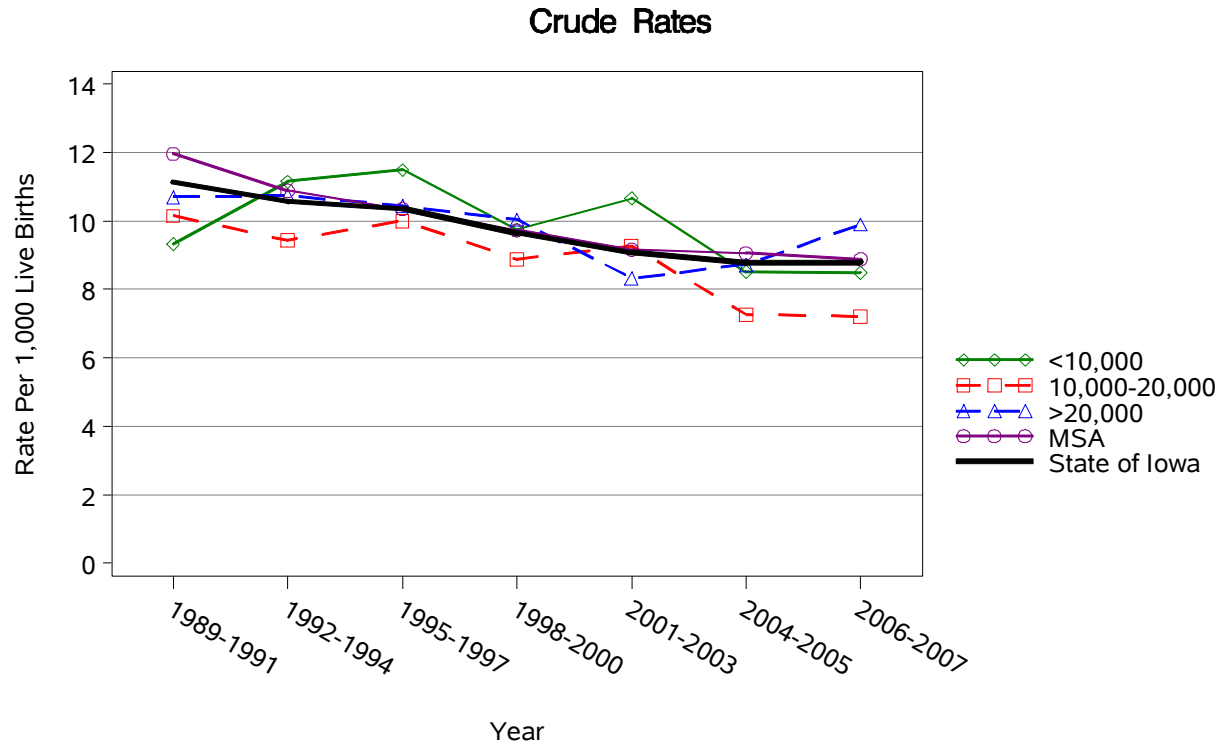
Infant Deaths 2006-2007

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Lucas	*	*
	Adams	*	*	Monona	*	*
	Audubon	*	*	Monroe	*	*
	Clarke	*	*	Osceola	*	*
	Davis	*	*	Palo Alto	*	*
	Decatur	*	*	Pocahontas	*	*
	Fremont	*	*	Ringgold	*	*
	Greene	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Humboldt	*	*	Wayne	*	*
	Ida	*	*	Worth	*	*
				Total	24	5.7
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Iowa	*	*
	Buena Vista	*	*	Jefferson	*	*
	Butler	*	*	Keokuk	*	*
	Calhoun	*	*	Kossuth	*	*
	Cass	*	*	Louisa	*	*
	Cedar	*	*	Lyon	*	*
	Cherokee	*	*	Mitchell	*	*
	Chickasaw	*	*	Montgomery	*	*
	Clay	*	*	O'Brien	*	*
	Clayton	*	*	Page	*	*
	Crawford	5	9.7	Poweshiek	*	*
	Delaware	*	*	Sac	*	*
	Dickinson	*	*	Shelby	*	*
	Emmet	5	18.3	Tama	*	*
	Floyd	*	*	Union	*	*
	Franklin	*	*	Winnebago	*	*
	Hamilton	*	*	Wright	*	*
	Hancock	*	*	Total	63	4.9
Counties with Average Population > 20,000	Boone	*	*	Lee	*	*
	Buchanan	*	*	Mahaska	5	8.1
	Carroll	*	*	Marion	*	*
	Cerro Gordo	7	6.7	Marshall	*	*
	Clinton	16	12.4	Muscatine	*	*
	Des Moines	7	6.3	Plymouth	*	*
	Fayette	*	*	Sioux	10	9.8
	Henry	*	*	Wapello	5	5
	Jackson	*	*	Webster	*	*
	Jasper	*	*	Winneshiek	*	*
				Total	86	5.2
MSA Counties	Benton	*	*	Linn	30	5.3
	Black Hawk	18	5.1	Madison	*	*
	Bremer	5	8.6	Mills	*	*
	Dallas	7	3.8	Polk	80	5.8
	Dubuque	14	5.7	Pottawattamie	18	7.3
	Grundy	*	*	Scott	28	6.1
	Guthrie	*	*	Story	6	2.9
	Harrison	*	*	Warren	*	*
	Johnson	19	5.8	Washington	*	*
	Jones	*	*	Woodbury	21	6.3
				Total	259	5.4
State Total		432	5.3			

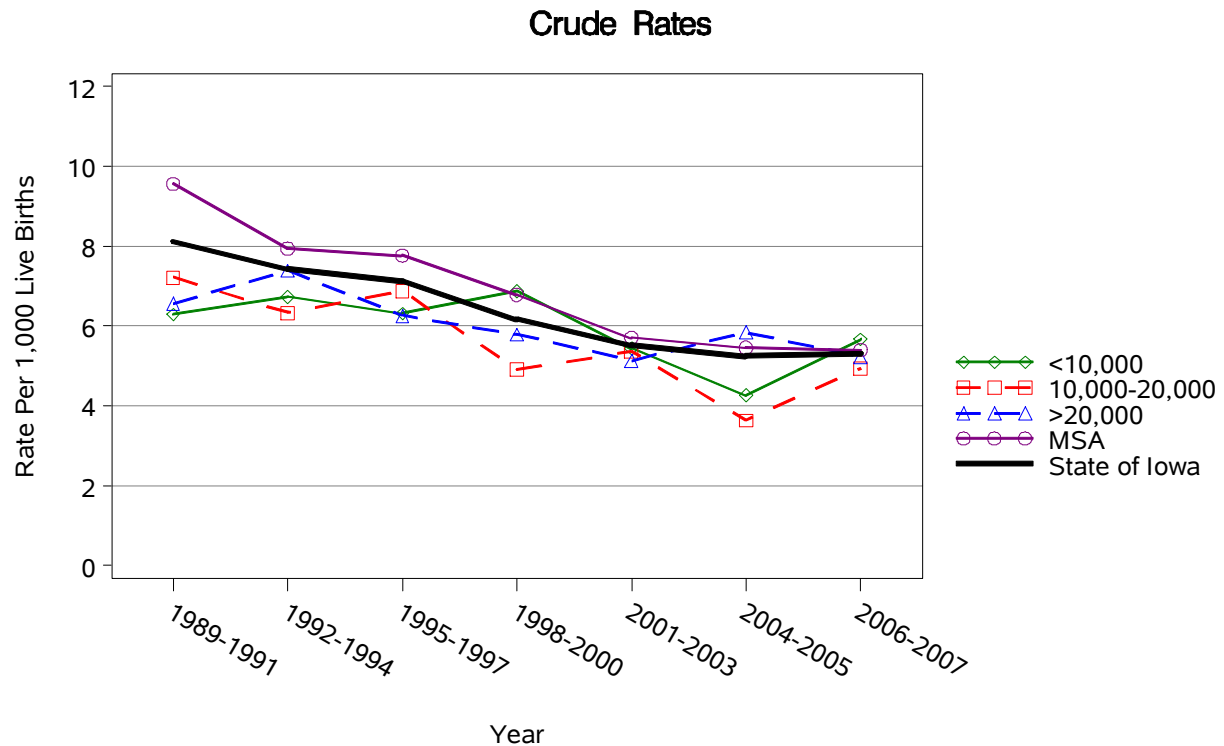
¹Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates
* represents a count less than 5

Perinatal Deaths by County Group 1989-2007



Infant Deaths by County Group 1989-2007



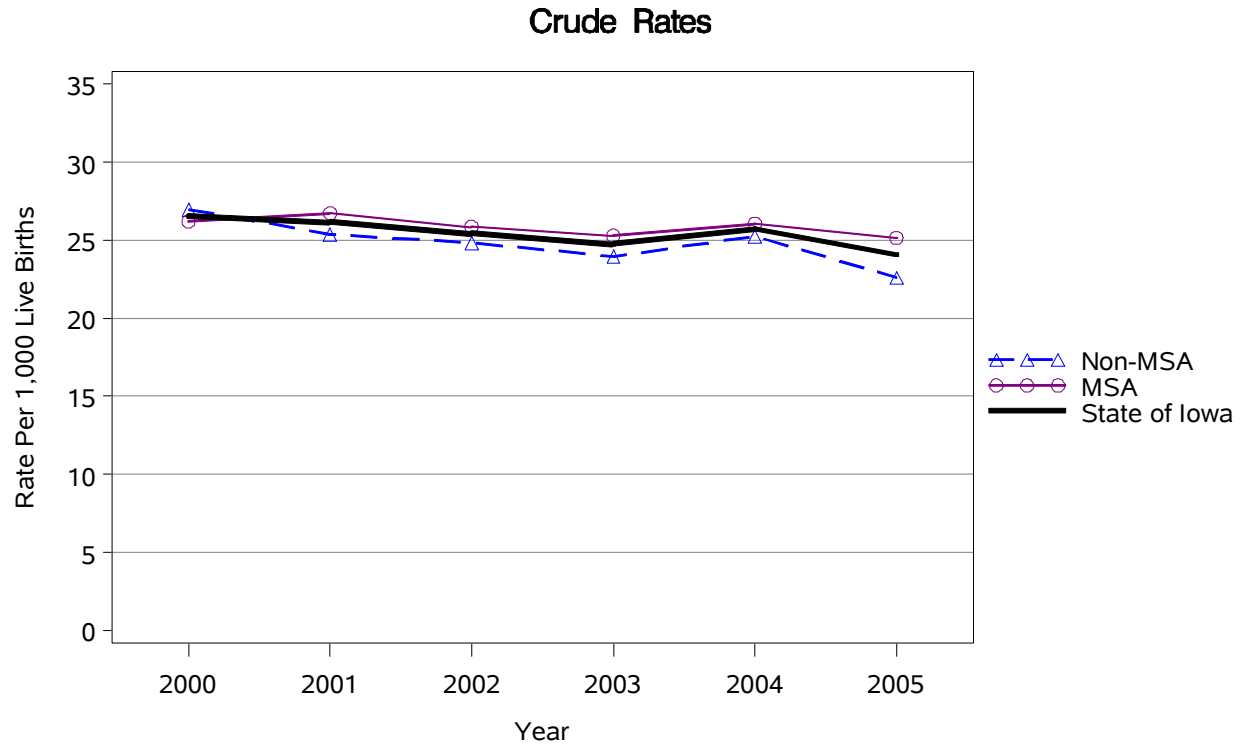
Birth Defects 2004-2005

	Counties with Average Population < 10,000			Counties with Average Population 10,000 – 20,000			Counties with Average Population > 20,000			MSA Counties				
	County	#	Crude ¹	County	#	Crude ¹	County	#	Crude ¹	County	#	Crude ¹		
Counties with Average Population < 10,000	Adair	*	*	Lucas	8	38.3	Counties with Average Population 10,000 – 20,000	Hardin	7	17.2	Counties with Average Population > 20,000	Boone	9	15.1
	Adams	*	*	Monona	*	*		Iowa	14	35.9		Buchanan	18	30.6
	Audubon	*	*	Monroe	*	*		Jefferson	16	49.5		Carroll	10	18.9
	Clarke	5	19.5	Osceola	*	*		Keokuk	6	23.2		Cerro Gordo	33	34.0
	Davis	7	27.4	Palo Alto	*	*		Kossuth	6	16.8		Clinton	41	33.5
	Decatur	*	*	Pocahontas	*	*		Louisa	9	30.7		Des Moines	31	30.2
	Fremont	*	*	Ringgold	*	*		Lyon	*	*		Fayette	8	17.4
	Greene	*	*	Taylor	*	*		Mitchell	*	*		Henry	13	25.9
	Howard	5	20.0	Van Buren	8	43.0		Montgomery	7	26.2		Jackson	12	30.7
	Humboldt	7	26.5	Wayne	*	*		O'Brien	*	*		Jasper	24	26.8
	Ida	*	*	Worth	*	*		Page	*	*				
				Total	40	10.0		Poweshiek	12	31.7				
								Sac	*	*				
	Counties with Average Population 10,000 – 20,000	Allamakee	6	14.6	Hardin	7		17.2	Counties with Average Population > 20,000	Tama		12	24.3	Benton
Appanoose		5	15.2	Iowa	14	35.9	Union	7		23.7	Black Hawk	127	37.4	
Buena Vista		14	25.0	Jefferson	16	49.5	Winnebago	8		36.2	Bremer	16	31.7	
Butler		10	28.6	Keokuk	6	23.2	Wright	10		28.5	Dallas	38	26.2	
Calhoun		7	32.5	Kossuth	6	16.8	Total	243		19.5	Dubuque	72	30.9	
Cass		6	18.7	Louisa	9	30.7	Lee	26		32.8	Grundy	17	72.3	
Cedar		15	37.6	Lyon	*	*	Mahaska	20		34.8	Guthrie	8	34.3	
Cherokee		5	22.1	Mitchell	*	*	Marion	23		28.0	Harrison	7	22.4	
Chickasaw		*	*	Montgomery	7	26.2	Marshall	33		26.3	Johnson	72	23.9	
Clay		11	26.9	O'Brien	*	*	Muscatine	42		35.8	Jones	15	33.6	
Clayton		10	25.2	Poweshiek	12	31.7	Plymouth	13		20.4				
Crawford		5	11.0	Sac	*	*	Sioux	6		6.4				
Delaware		13	32.6	Shelby	5	23.1	Wapello	34		34.7				
Dickinson		*	*	Tama	12	24.3	Webster	14		14.5				
Emmet		*	*	Union	7	23.7	Winneshiek	6		15.1				
Floyd	11	26.5	Winnebago	8	36.2	Total	416	26.5						
Franklin	*	*	Wright	10	28.5									
Hamilton	6	15.5												
Hancock	*	*												
MSA Counties	Benton	17	28.0	Linn	149	26.9	MSA Counties	Madison	10	26.0	MSA Counties	Woodbury	75	23.3
	Black Hawk	127	37.4	Madison	10	26.0		Mills	6	15.8				
	Bremer	16	31.7	Mills	6	15.8		Polk	288	22.3				
	Dallas	38	26.2	Polk	288	22.3		Pottawattamie	37	15.1				
	Dubuque	72	30.9	Pottawattamie	37	15.1		Scott	134	29.0				
	Grundy	17	72.3	Scott	134	29.0		Story	33	17.9				
	Guthrie	8	34.3	Story	33	17.9		Warren	27	25.6				
	Harrison	7	22.4	Warren	27	25.6		Washington	16	28.8				
	Johnson	72	23.9	Washington	16	28.8								
	Jones	15	33.6	Woodbury	75	23.3								
				Total	1,164	25.6								

¹Rates per 1,000 live births

 Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates
 * represents a count less than 5

Birth Defects by County Group 2000-2005



¹ < 10,000 and 10,000-20,000 combined due to substantial year to year variation

Selected Birth Defects in Iowa 2004-2005

Defect Name	Defects	Crude Rate ¹
Anencephalus	22	0.28
Spina bifida without anencephalus	35	0.45
Hydrocephalus without spina bifida	85	1.09
Encephalocele	*	*
Microcephalus	78	1.00
Anophthalmia/microthemia	24	0.31
Congenital Cataract	22	0.28
Anotia/microtia	10	0.13
Common truncus	9	0.11
Transposition of great arteries	36	0.46
Tetralogy of Fallot	27	0.35
Ventricular septal defect	431	5.55
Atrial septal defect	258	3.32
Endocardial cushion defect	58	0.75
Pulmonary valve atresia and stenosis	73	0.94
Tricuspid valve atresia and stenosis	14	0.18
Ebsteins's anomaly	5	0.06
Aortic valve stenosis	34	0.44
Hypoplastic left heart syndrome	18	0.23
Patent ductus arteriosus	206	2.65
Coarctation of aorta	36	0.46
Cleft palate without cleft lip	58	0.75
Cleft lip with and without cleft palate	89	1.15
Choanal atresia	15	0.19
Esophageal atresia/tracheoesophageal fistula	17	0.22
Rectal and large intestinal atresia/stenosis	46	0.59
Pyloric stenosis	228	2.94
Hirschsprung's disease (congenital megacolon)	12	0.15
Biliary atresia	*	*
Renal agenesis/hypoplasia	55	0.71
Bladder exstrophy	7	0.09
Obstructive genitourinary defect	212	2.73
Hypospadias and epispadias	130	1.67
Reduction deformity, upper limbs	40	0.51
Reduction deformity, lower limbs	17	0.22
Gastroschisis	38	0.49
Omphalocele	24	0.31
Congenital hip dislocation	64	0.82
Diaphragmatic hernia	6	0.08
Trisomy 13	16	0.21
Down syndrome	129	1.66
Trisomy 18	24	0.31
Amniotic bands	13	0.17

¹Rates per 1,000 live births

Source: Iowa Birth Defects Registry, The University of Iowa

* represents a count less than 5

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Infectious Diseases

Fifty-one specific infectious diseases are listed as reportable conditions in the Iowa Administrative Code 641, Chapter 1, although many other diseases are reportable as rare or unusual diseases. Disease surveillance, consulting, and outbreak management are provided by the Center for Acute Disease Epidemiology. The Bureau of Prevention and Immunization provided education programs and vaccine distribution services. Local public health nurses or

HIGHLIGHTS...

- ✓ IDPH received 1964 disease reports of cases of Mumps in 2006.
- ✓ IDPH received 107 reports of cases of Hepatitis A in 2008.
- ✓ IDPH followed-up on 426 cases of Salmonella in 2008

disease prevention specialists, in conjunction with the staff epidemiologists at the Iowa Department of Public Health, interview persons with selected conditions or diseases and conduct investigations of disease outbreaks. Disease prevention steps include promoting vaccinations, partner counseling/referral services for sexually transmitted diseases, and disease

education initiatives.

Increases in reported cases of certain infectious diseases are often the result of specific outbreak situations:

- Increases in Hepatitis A cases reported from 1996–1998 were due to outbreaks in Woodbury (1996) and Polk (1997-1998) counties and were related to transmission among methamphetamine users.
- An imported case of measles occurred in 2004 in an Iowa resident returning from India. Two additional cases of measles were traced back to the imported case.
- Iowa experienced large outbreaks of pertussis and mumps cases statewide during the 2004-2006 timeframe.
- The outbreak of rubella in 1999 originated in a Hispanic migrant worker population. Immunization clinics were held in a number of packing plants across the state to contain the outbreak.

Infectious diseases continue to be a concern, and IDPH is working daily to control local outbreaks.

Sexually Transmitted Diseases¹ 2007-2008

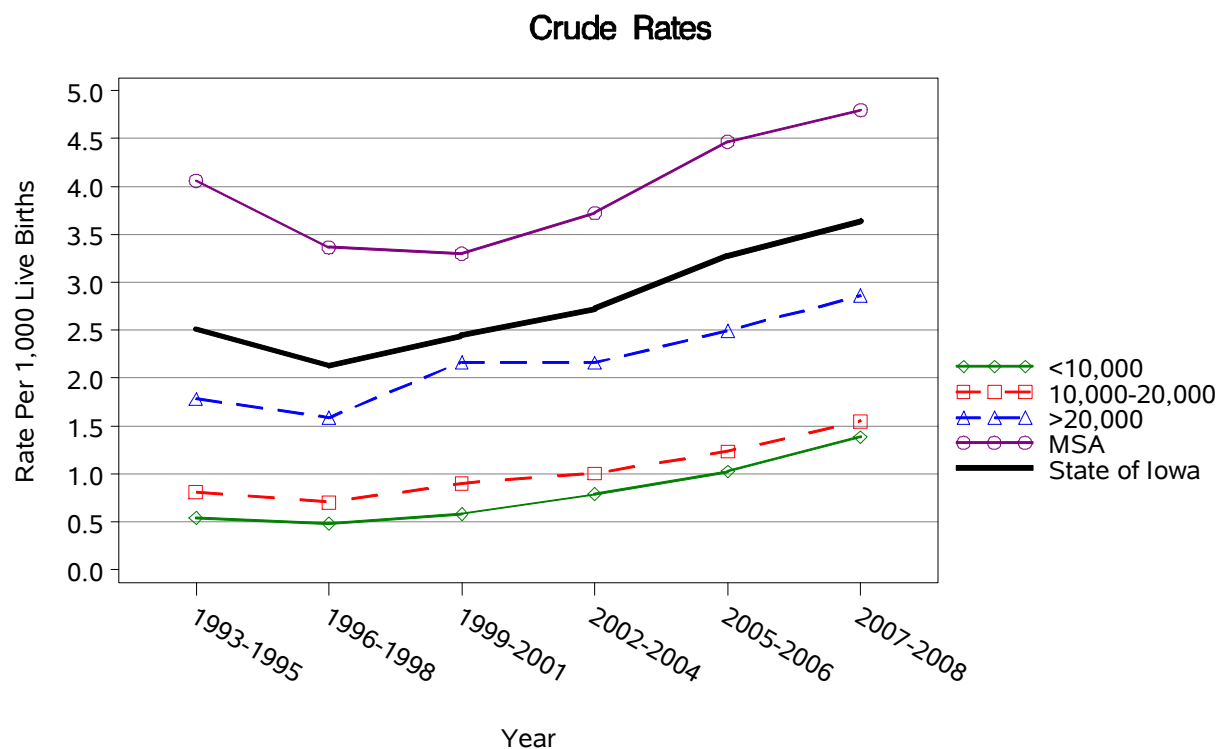
	County	#	Crude Rate ²	County	#	Crude Rate ²
Counties with Average Population < 10,000	Adair	24	1.6	Lucas	18	1.0
	Adams	12	1.5	Monona	27	1.5
	Audubon	10	0.8	Monroe	26	1.7
	Clarke	36	2.0	Osceola	8	0.6
	Davis	11	0.6	Palo Alto	25	1.3
	Decatur	38	2.3	Pocahontas	18	1.2
	Fremont	14	0.9	Ringgold	8	0.8
	Greene	25	1.3	Taylor	15	1.2
	Howard	33	1.7	Van Buren	15	1.0
	Humboldt	44	2.3	Wayne	19	1.5
	Ida	27	2.0	Worth	15	1.0
				Total	468	1.4
Counties with Average Population 10,000 – 20,000	Allamakee	59	2.0	Hardin	49	1.4
	Appanoose	39	1.5	Iowa	42	1.3
	Buena Vista	102	2.6	Jefferson	31	1.0
	Butler	27	0.9	Keokuk	24	1.1
	Calhoun	29	1.5	Kossuth	28	0.9
	Cass	64	2.3	Louisa	51	2.2
	Cedar	42	1.2	Lyon	8	0.4
	Cherokee	22	0.9	Mitchell	16	0.7
	Chickasaw	34	1.4	Montgomery	43	2.0
	Clay	85	2.5	O'Brien	20	0.7
	Clayton	35	1.0	Page	46	1.5
	Crawford	126	3.8	Poweshiek	73	2.0
	Delaware	25	0.7	Sac	27	1.3
	Dickinson	41	1.2	Shelby	33	1.4
	Emmet	38	1.8	Tama	109	3.1
	Floyd	44	1.4	Union	54	2.2
	Franklin	23	1.1	Winnebago	35	1.6
	Hamilton	40	1.3	Wright	39	1.5
	Hancock	13	0.6	Total	1,616	1.6
Counties with Average Population > 20,000	Boone	120	2.3	Lee	224	3.1
	Buchanan	75	1.8	Mahaska	124	2.8
	Carroll	52	1.2	Marion	107	1.6
	Cerro Gordo	234	2.7	Marshall	257	3.3
	Clinton	403	4.1	Muscatine	277	3.3
	Des Moines	465	5.7	Plymouth	66	1.4
	Fayette	82	2.0	Sioux	58	0.9
	Henry	110	2.7	Wapello	219	3.1
	Jackson	87	2.2	Webster	415	5.4
	Jasper	117	1.6	Winneshiek	73	1.7
				Total	3,565	2.9
	MSA Counties	Benton	61	1.2	Linn	1,921
Black Hawk		2,010	7.9	Madison	56	1.8
Bremer		64	1.3	Mills	54	1.8
Dallas		170	1.5	Polk	4,795	5.7
Dubuque		729	3.9	Pottawattamie	505	2.8
Grundy		27	1.1	Scott	2,401	7.3
Guthrie		15	0.7	Story	632	3.7
Harrison		30	1.0	Warren	125	1.4
Johnson		1,312	5.2	Washington	73	1.7
Jones		74	1.8	Woodbury	1,080	5.3
				Total	16,134	4.8
State Total		21,783	3.6			

¹Includes syphilis, gonorrhea, and chlamydia, but not latent cases (infection > 1 year)

²Rates per 1,000 population

Source: Disease Prevention Program, Iowa Department of Public Health

Sexually Transmitted Diseases by County Group 1993-2008



Selected Infectious Diseases

State of Iowa

2000–2008

	Number of Cases Reported								
	2000	2001	2002	2003	2004	2005	2006	2007	2008
AIDS	79	80	75	76	69	78	84	67	65
Campylobacteriosis	499	467	427	458	559	537	449	526	593
Chlamydia	5,994	5,716	6,236	6,462	6,973	7,390	8,386	8,644	9,372
Cryptosporidiosis	77	82	49	122	90	122	231	611	282
E. coli	180	81	122	103	124	108	163	185	223
Giardiasis	420	345	315	277	301	280	303	307	327
Gonorrhea	1,380	1,424	1,495	1,544	1,254	1,606	1,967	1,928	1,700
Hepatitis A	67	41	72	40	50	22	13	49	107
Measles	0	0	0	0	3	0	0	0	0
Mumps	8	1	1	2	2	6	1,964	27	24
Pertussis	67	167	230	182	1066	1106	345	145	232
Rubella	0	1	0	0	0	0	0	0	0
Salmonella	373	339	509	413	435	410	475	478	426
Shigellosis	569	367	122	93	64	103	136	109	213
Syphilis (primary or secondary)	11	5	10	12	6	9	19	21	16
Tuberculosis	40	43	34	40	47	55	40	43	49

Source: Bureau of Infectious Diseases, Iowa Department of Public Health

Cancer Incidence and Mortality

Cancer is the second leading cause of death in Iowa. From 2002 through 2006, 32,094 Iowans died from cancer and 78,809 invasive cancers were newly diagnosed. During this period, cancer accounted for 23% of deaths in Iowa. Although it occurs in people of all ages, 80 percent of these new cancers were diagnosed in those 55 years of age and older.

For all cancer incidence and mortality, the age-adjusted rates by county grouping increased slightly as the average population increased between the three time periods spanning 1978 through 1995. For the 1996-2006 period, these rates show little difference. The crude rates, however, show the opposite trend, as these rates were highest in counties with average populations < 10,000. This reflects a larger proportion of older people in the smaller, more rural counties (see tables and graph in Demographics). Since the 1990s, the

FOUR PRIMARY TYPES OF CANCER IN IOWA ...

Prostate
Female Breast
Lung
Colorectum

MOST COMMON CANCERS IN IOWA

Females

Breast
Colorectum
Lung

Males

Prostate
Lung
Colorectum

Children (0-19)

Leukemia
Brain and other central nervous system
Lymphomas

U.S. and Iowa have experienced a decline in age-adjusted cancer mortality rates. Today, less than half of Iowans newly diagnosed with a cancer will die from it. Survival rates, however, vary considerably by cancer site. As the survival rate decreases, the number of cancer deaths gets closer to the number of newly diagnosed cancers.

Tobacco use is the leading modifiable risk factor for cancer, and is associated with cancers of the lung, oral cavity (excluding lip),

esophagus, larynx, pancreas, stomach, uterine cervix, urinary bladder, and kidney. Alcohol consumption is also a known risk factor for cancers of the oral cavity (excluding lip), esophagus, and larynx. Ongoing research indicates that dietary factors may play an important role in the occurrence of cancers of the prostate and colorectum. Other important risk factors include obesity for cancers of the uterine corpus and kidney, excessive sunlight exposure for skin melanoma, and genetic predisposition (or positive family history) for colorectal, prostate, and breast cancers.

The State Health Registry of Iowa has been recording the occurrence of cancer in Iowa since 1973. It receives mortality data from the Iowa Department of Public Health (IDPH). The Registry's incidence and IDPH's mortality databases have been used to generate the cancer incidence and cancer mortality statistics provided in this section of the 2009 Iowa Health Fact Book via a software program called SEER*Stat (version 6.5.1), which is provided by the National Cancer Institute.

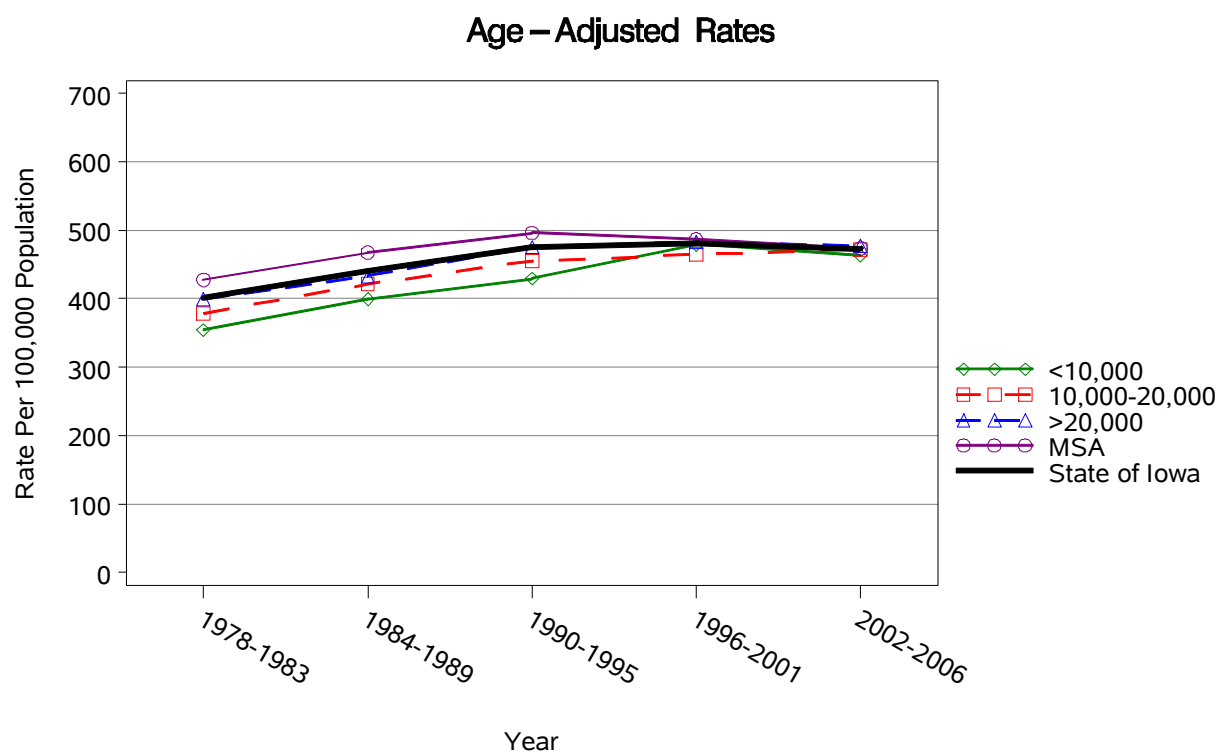
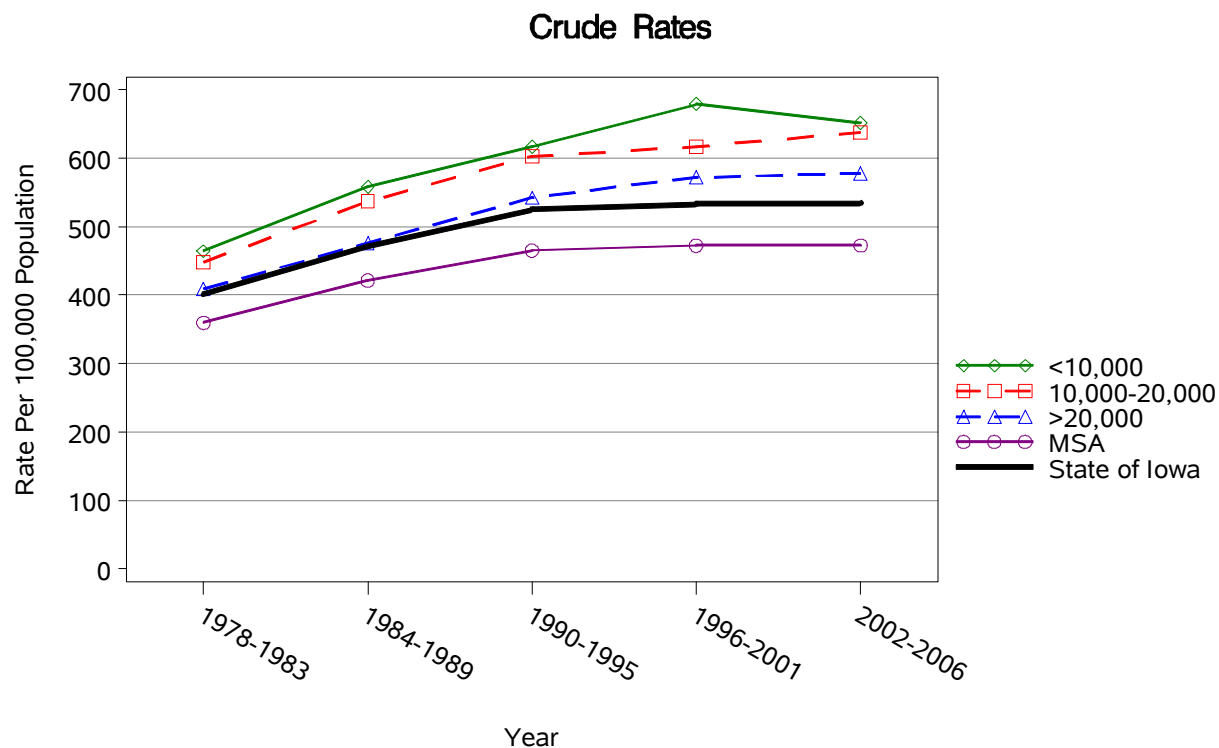
All Cancer Incidence 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	259	661.3 (25)	460.6 (68)	Lucas	293	615.2 (46)	461.1 (67)
	Adams	155	729.2 (09)	491.0 (25)	Monona	348	733.0 (07)	472.5 (52)
	Audubon	234	736.0 (06)	482.7 (37)	Monroe	261	673.2 (18)	503.7 (10)
	Clarke	255	556.6 (71)	462.5 (62)	Osceola	234	694.8 (16)	522.1 (03)
	Davis	222	520.0 (83)	417.2 (95)	Palo Alto	340	704.3 (15)	501.0 (12)
	Decatur	249	587.1 (60)	472.1 (53)	Pocahontas	313	782.3 (01)	492.7 (23)
	Fremont	236	616.4 (44)	451.8 (76)	Ringgold	172	657.2 (27)	423.3 (92)
	Greene	329	664.9 (21)	453.2 (75)	Taylor	201	602.7 (53)	409.5 (97)
	Howard	273	563.9 (68)	418.0 (93)	Van Buren	233	606.8 (51)	450.1 (78)
	Humboldt	351	706.7 (14)	484.1 (34)	Wayne	232	712.4 (12)	455.9 (73)
	Ida	272	745.6 (04)	490.0 (27)	Worth	214	553.8 (72)	411.8 (96)
					Total	5,676	652.1	463
Counties with Average Population 10,000 – 20,000	Allamakee	451	623.6 (42)	466.7 (59)	Hardin	568	630.2 (37)	441.7 (83)
	Appanoose	447	669.6 (20)	473.8 (49)	Iowa	485	611.0 (50)	496.3 (18)
	Buena Vista	563	565.2 (67)	474.2 (47)	Jefferson	368	469.6 (94)	393.8 (99)
	Butler	465	629.7 (38)	441.9 (82)	Keokuk	328	592.4 (59)	439.2 (85)
	Calhoun	406	779.9 (02)	506.8 (08)	Kossuth	554	687.0 (17)	477.3 (42)
	Cass	424	602.4 (54)	417.3 (94)	Louisa	321	534.4 (77)	478.7 (41)
	Cedar	571	633.4 (34)	518.3 (04)	Lyon	344	597.5 (55)	469.9 (57)
	Cherokee	434	711.2 (13)	475.8 (46)	Mitchell	356	657.3 (26)	458.1 (70)
	Chickasaw	394	631.4 (36)	482.2 (38)	Montgomery	354	632.0 (35)	458.9 (69)
	Clay	560	662.9 (23)	498.9 (14)	O'Brien	527	730.6 (08)	494.9 (21)
	Clayton	581	644.9 (32)	487.5 (30)	Page	600	743.5 (05)	531.8 (01)
	Crawford	514	615.9 (45)	497.4 (16)	Poweshiek	557	594.0 (58)	467.9 (58)
	Delaware	485	544.6 (75)	462.2 (64)	Sac	416	773.8 (03)	514.9 (05)
	Dickinson	599	726.3 (10)	496.6 (17)	Shelby	408	647.3 (31)	456.7 (72)
	Emmet	343	648.0 (30)	496.3 (18)	Tama	593	662.4 (24)	507.5 (07)
	Floyd	490	595.7 (57)	438.0 (87)	Union	374	624.1 (41)	464.8 (60)
	Franklin	334	629.4 (39)	447.6 (80)	Winnebago	306	544.9 (74)	401.6 (98)
	Hamilton	458	571.3 (65)	445.7 (81)	Wright	484	715.6 (11)	498.7 (15)
	Hancock	358	612.8 (48)	462.4 (63)	Total	16,608	638	472.2
Counties with Average Population > 20,000	Boone	687	523.8 (80)	440.9 (84)	Lee	1,117	614.3 (47)	481.0 (39)
	Buchanan	599	575.8 (63)	506.0 (09)	Mahaska	590	532.1 (78)	455.0 (74)
	Carroll	635	605.8 (52)	457.4 (71)	Marion	813	501.6 (87)	432.1 (89)
	Cerro Gordo	1,434	641.1 (33)	500.6 (13)	Marshall	1,168	597.0 (56)	484.8 (33)
	Clinton	1,450	587.0 (61)	486.7 (31)	Muscatine	1,048	499.8 (88)	476.3 (44)
	Des Moines	1,372	670.2 (19)	526.4 (02)	Plymouth	708	575.6 (64)	483.3 (36)
	Fayette	691	654.9 (28)	473.1 (50)	Sioux	833	522.1 (81)	477.3 (42)
	Henry	505	502.7 (86)	439.1 (86)	Wapello	1,103	616.8 (43)	495.5 (20)
	Jackson	629	625.7 (40)	490.3 (26)	Webster	1,130	578.4 (62)	479.4 (40)
	Jasper	1,055	567.2 (66)	471.2 (55)	Winneshek	522	498.3 (91)	424.4 (91)
					Total	18,089	578	477.5
MSA Counties	Benton	720	545.9 (73)	488.3 (29)	Linn	4,923	495.3 (92)	486.3 (32)
	Black Hawk	3,302	521.2 (82)	483.5 (35)	Madison	376	510.9 (85)	462.2 (64)
	Bremer	621	530.9 (79)	432.9 (88)	Mills	369	499.4 (89)	471.0 (56)
	Dallas	1,062	430.6 (97)	513.2 (06)	Polk	8,680	437.0 (96)	463.7 (61)
	Dubuque	2,420	534.7 (76)	474.2 (47)	Pottawattamie	2,212	498.9 (90)	461.7 (66)
	Grundy	407	663.6 (22)	492.8 (22)	Scott	4,083	511.1 (84)	502.0 (11)
	Guthrie	368	654.2 (29)	472.6 (51)	Story	1,428	347.0 (99)	426.5 (90)
	Harrison	476	612.8 (48)	491.8 (24)	Warren	982	462.4 (95)	449.0 (79)
	Johnson	2,120	354.4 (98)	488.9 (28)	Washington	593	563.1 (70)	451.1 (77)
	Jones	572	563.9 (68)	471.5 (54)	Woodbury	2,510	490.1 (93)	476.3 (44)
					Total	38,224	472.6	473.7
State Total		78,809	534.6	473.6				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

All Cancer Incidence by County Group 1978-2006

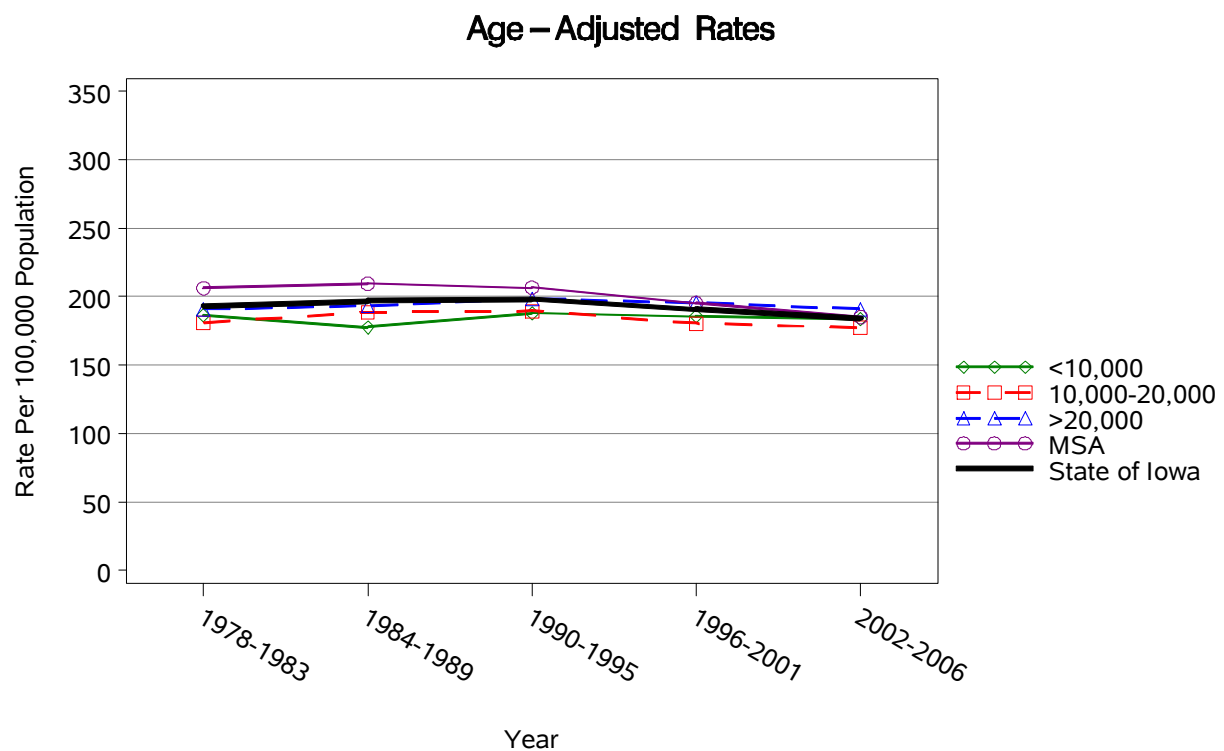
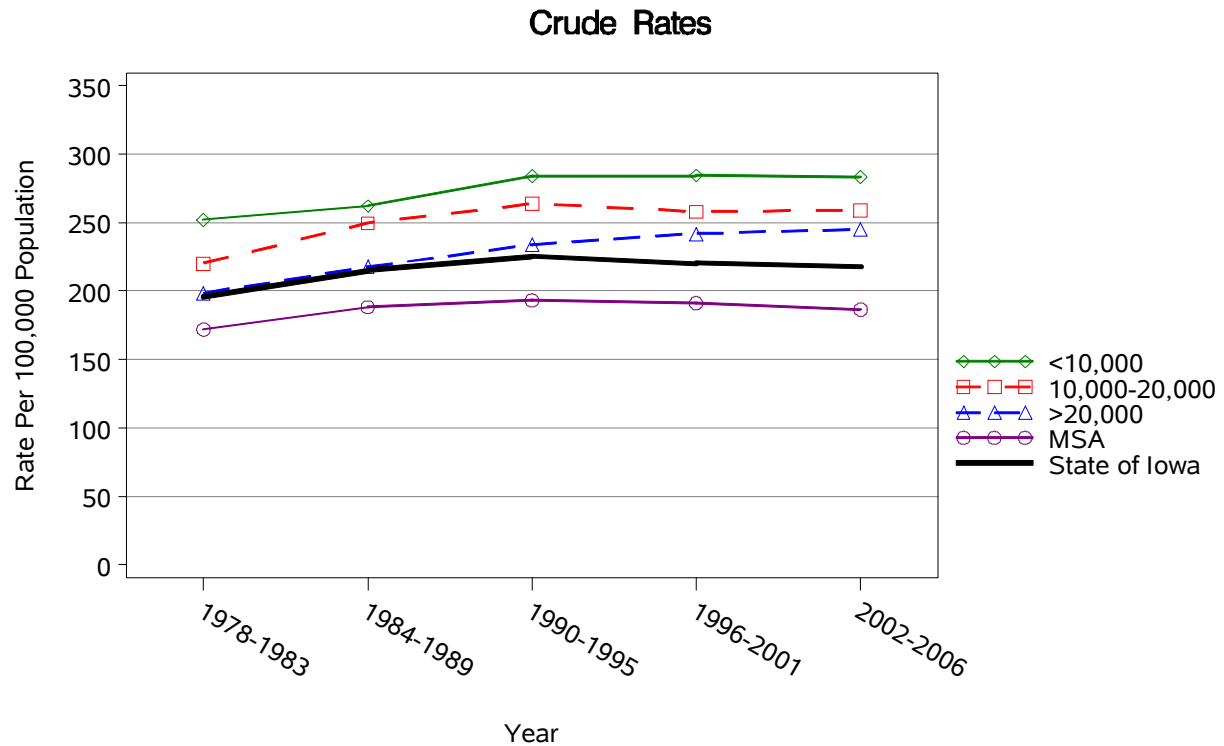


All Cancer Mortality 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	118	301.3 (15)	193.2 (26)	Lucas	122	256.2 (51)	182.0 (52)
	Adams	62	291.7 (18)	186.8 (39)	Monona	163	343.3 (01)	190.5 (34)
	Audubon	109	342.9 (02)	193.6 (24)	Monroe	118	304.4 (14)	209.6 (05)
	Clarke	112	244.5 (56)	196.0 (22)	Osceola	96	285.1 (20)	206.1 (09)
	Davis	93	217.8 (78)	163.9 (84)	Palo Alto	152	314.8 (10)	193.0 (27)
	Decatur	95	224.0 (75)	164.3 (81)	Pocahontas	135	337.4 (04)	204.4 (14)
	Fremont	87	227.2 (69)	150.2 (94)	Ringgold	83	317.2 (08)	176.6 (65)
	Greene	138	278.9 (22)	169.7 (74)	Taylor	79	236.9 (62)	146.1 (96)
	Howard	124	256.1 (52)	172.3 (71)	Van Buren	118	307.3 (13)	204.9 (11)
	Humboldt	136	273.8 (25)	171.5 (72)	Wayne	103	316.3 (09)	178.4 (62)
	Ida	123	337.2 (05)	207.0 (07)	Worth	102	263.9 (38)	185.8 (42)
					Total	2,468	283.5	183.6
Counties with Average Population 10,000 – 20,000	Allamakee	181	250.3 (54)	172.4 (70)	Hardin	268	297.4 (16)	192.4 (29)
	Appanoose	179	268.1 (33)	180.2 (58)	Iowa	201	253.2 (53)	185.0 (45)
	Buena Vista	210	210.8 (81)	163.6 (85)	Jefferson	147	187.6 (91)	150.9 (93)
	Butler	193	261.4 (42)	165.6 (78)	Keokuk	132	238.4 (61)	164.3 (81)
	Calhoun	162	311.2 (12)	185.4 (44)	Kossuth	218	270.3 (29)	169.2 (76)
	Cass	172	244.4 (57)	154.2 (90)	Louisa	161	268.1 (33)	231.4 (01)
	Cedar	207	229.6 (67)	177.5 (63)	Lyon	130	225.8 (72)	164.6 (80)
	Cherokee	161	263.8 (39)	160.7 (88)	Mitchell	144	265.9 (35)	165.6 (78)
	Chickasaw	160	256.4 (50)	180.7 (57)	Montgomery	126	224.9 (73)	153.5 (92)
	Clay	217	256.9 (49)	181.4 (56)	O'Brien	237	328.6 (06)	207.3 (06)
	Clayton	245	272.0 (27)	191.6 (32)	Page	259	321.0 (07)	210.5 (03)
	Crawford	224	268.4 (32)	203.1 (15)	Poweshiek	229	244.2 (58)	184.1 (46)
	Delaware	193	216.7 (79)	172.8 (69)	Sac	183	340.4 (03)	199.1 (19)
	Dickinson	199	241.3 (60)	153.6 (91)	Shelby	184	291.9 (17)	190.9 (33)
	Emmet	144	272.1 (26)	181.8 (54)	Tama	236	263.6 (40)	182.1 (51)
	Floyd	204	248.0 (55)	164.2 (83)	Union	163	272.0 (27)	188.5 (36)
	Franklin	141	265.7 (36)	170.3 (73)	Winnebago	117	208.3 (83)	139.0 (98)
	Hamilton	206	257.0 (48)	186.8 (39)	Wright	211	312.0 (11)	186.4 (41)
	Hancock	132	226.0 (71)	157.2 (89)	Total	6,876	259.2	177.2
Counties with Average Population > 20,000	Boone	297	226.4 (70)	182.2 (50)	Lee	482	265.1 (37)	199.1 (19)
	Buchanan	246	236.5 (64)	197.3 (21)	Mahaska	233	210.1 (82)	173.8 (66)
	Carroll	272	259.5 (43)	169.7 (74)	Marion	374	230.7 (65)	185.6 (43)
	Cerro Gordo	579	258.9 (44)	187.2 (38)	Marshall	506	258.6 (46)	200.1 (17)
	Clinton	639	258.7 (45)	204.7 (12)	Muscatine	478	227.9 (68)	217.0 (02)
	Des Moines	575	280.9 (21)	207.0 (07)	Plymouth	283	230.1 (66)	184.0 (48)
	Fayette	293	277.7 (23)	184.1 (46)	Sioux	285	178.6 (94)	149.7 (95)
	Henry	220	219.0 (77)	178.8 (60)	Wapello	483	270.1 (31)	204.7 (12)
	Jackson	260	258.6 (46)	191.8 (31)	Webster	511	261.6 (41)	201.9 (16)
	Jasper	452	243.0 (59)	193.4 (25)	Winnesiek	199	190.0 (89)	145.2 (97)
					Total	7,667	245	190.9
MSA Counties	Benton	260	197.1 (87)	167.3 (77)	Linn	1,855	186.6 (92)	181.8 (54)
	Black Hawk	1,305	206.0 (84)	184.0 (48)	Madison	145	197.0 (88)	173.5 (67)
	Bremer	212	181.2 (93)	134.9 (99)	Mills	140	189.5 (90)	181.9 (53)
	Dallas	392	158.9 (97)	195.5 (23)	Polk	3,503	176.3 (95)	189.3 (35)
	Dubuque	963	212.8 (80)	178.7 (61)	Pottawattamie	995	224.4 (74)	205.3 (10)
	Grundy	175	285.3 (19)	192.0 (30)	Scott	1,607	201.2 (86)	199.7 (18)
	Guthrie	152	270.2 (30)	179.3 (59)	Story	564	137.1 (98)	163.3 (86)
	Harrison	215	276.8 (24)	210.3 (04)	Warren	374	176.1 (96)	173.1 (68)
	Johnson	718	120.0 (99)	177.1 (64)	Washington	232	220.3 (76)	161.7 (87)
	Jones	240	236.6 (63)	187.4 (37)	Woodbury	1,036	202.3 (85)	192.5 (28)
					Total	15,083	186.5	185.1
State Total		32,094	217.7	184.3				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

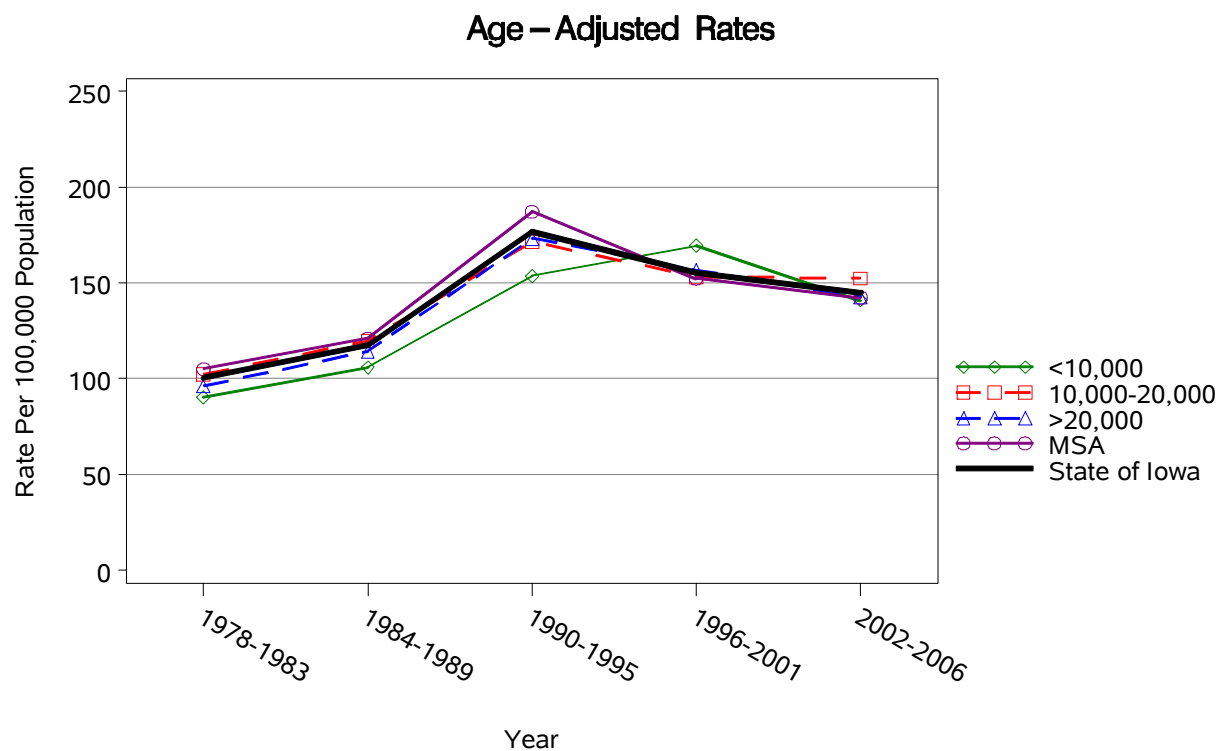
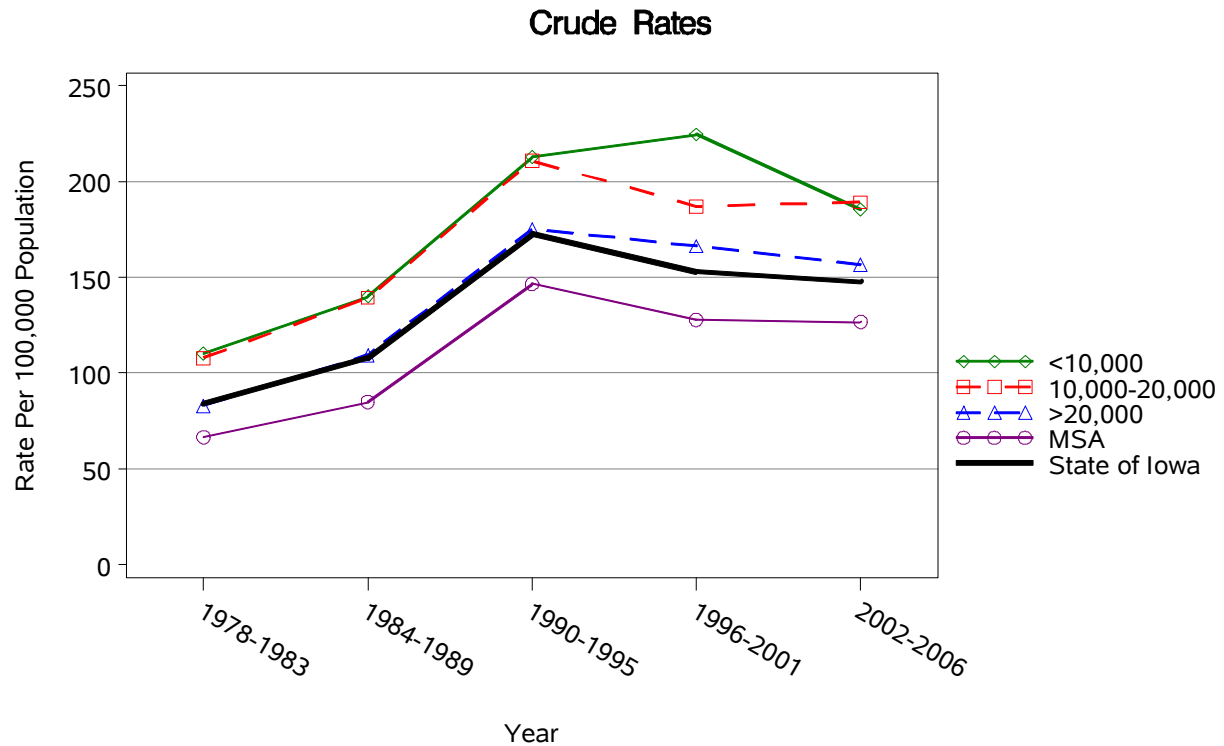
All Cancer Mortality by County Group 1978-2006

Prostate Cancer Incidence 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	44	229.8 (08)	162.6 (23)	Lucas	43	184.7 (34)	150.6 (42)
	Adams	16	152.2 (62)	103.8 (97)	Monona	50	216.5 (15)	149.4 (44)
	Audubon	46	300.3 (01)	204.4 (02)	Monroe	28	147.4 (69)	117.0 (86)
	Clarke	34	149.1 (65)	134.6 (65)	Osceola	28	167.8 (51)	142.6 (54)
	Davis	36	169.3 (49)	147.0 (50)	Palo Alto	56	236.1 (05)	179.0 (09)
	Decatur	26	124.9 (89)	107.9 (94)	Pocahontas	55	277.8 (03)	197.1 (03)
	Fremont	30	157.9 (58)	119.1 (85)	Ringgold	19	148.9 (66)	98.9 (99)
	Greene	41	169.3 (49)	130.2 (70)	Taylor	24	147.5 (68)	107.3 (95)
	Howard	39	162.0 (55)	126.2 (75)	Van Buren	34	177.6 (41)	134.6 (65)
	Humboldt	46	188.2 (32)	145.6 (52)	Wayne	32	205.9 (21)	142.7 (53)
	Ida	40	223.5 (09)	159.4 (28)	Worth	27	139.8 (81)	113.4 (89)
					Total	794	185.5	141
Counties with Average Population 10,000 – 20,000	Allamakee	81	221.7 (12)	182.1 (08)	Hardin	77	173.9 (45)	135.0 (64)
	Appanoose	53	165.3 (53)	120.5 (82)	Iowa	57	146.6 (71)	126.7 (73)
	Buena Vista	100	198.6 (26)	188.0 (07)	Jefferson	49	127.4 (87)	123.4 (78)
	Butler	70	191.4 (29)	147.3 (48)	Keokuk	47	173.9 (45)	140.6 (58)
	Calhoun	62	235.4 (06)	170.5 (17)	Kossuth	88	222.5 (11)	160.6 (26)
	Cass	57	166.2 (52)	123.9 (77)	Louisa	35	117.1 (93)	113.1 (90)
	Cedar	80	179.6 (37)	156.6 (33)	Lyon	54	188.2 (32)	166.9 (19)
	Cherokee	59	195.9 (28)	140.8 (57)	Mitchell	46	173.0 (47)	127.9 (72)
	Chickasaw	64	204.9 (22)	163.3 (21)	Montgomery	39	146.7 (70)	115.3 (87)
	Clay	85	207.1 (19)	172.2 (16)	O'Brien	89	250.7 (04)	192.3 (05)
	Clayton	100	223.2 (10)	176.1 (11)	Page	90	218.3 (14)	175.5 (13)
	Crawford	90	214.1 (17)	192.2 (06)	Poweshiek	54	119.2 (92)	101.4 (98)
	Delaware	73	164.8 (54)	148.4 (46)	Sac	55	207.9 (18)	142.2 (56)
	Dickinson	119	295.0 (02)	209.9 (01)	Shelby	64	206.0 (20)	153.5 (37)
	Emmet	61	234.3 (07)	194.6 (04)	Tama	97	220.1 (13)	176.8 (10)
	Floyd	71	177.7 (40)	137.5 (61)	Union	41	142.5 (78)	112.7 (91)
	Franklin	37	140.1 (80)	108.9 (93)	Winnebago	50	182.6 (35)	150.8 (41)
	Hamilton	57	142.8 (77)	119.3 (84)	Wright	68	203.0 (23)	157.9 (31)
	Hancock	58	201.2 (25)	162.2 (24)	Total	2,477	189.2	152.4
Counties with Average Population > 20,000	Boone	73	113.4 (94)	105.7 (96)	Lee	140	155.0 (59)	133.7 (67)
	Buchanan	91	175.5 (43)	169.4 (18)	Mahaska	70	126.2 (88)	120.5 (82)
	Carroll	91	177.9 (39)	152.3 (39)	Marion	117	145.3 (76)	135.7 (63)
	Cerro Gordo	189	175.3 (44)	150.1 (43)	Marshall	171	175.8 (42)	151.6 (40)
	Clinton	175	145.6 (74)	130.0 (71)	Muscatine	136	130.6 (85)	139.8 (59)
	Des Moines	187	188.4 (31)	165.3 (20)	Plymouth	106	172.6 (48)	156.2 (34)
	Fayette	113	216.5 (15)	175.6 (12)	Sioux	122	155.0 (59)	159.1 (29)
	Henry	75	146.3 (72)	152.9 (38)	Wapello	124	141.7 (79)	125.4 (76)
	Jackson	79	158.8 (57)	130.6 (69)	Webster	128	129.4 (86)	122.2 (81)
	Jasper	140	148.2 (67)	137.7 (60)	Winnesiek	98	189.4 (30)	173.8 (15)
					Total	2,425	156.6	142.6
MSA Counties	Benton	99	150.5 (64)	146.7 (51)	Linn	676	138.6 (83)	149.4 (44)
	Black Hawk	489	160.2 (56)	162.7 (22)	Madison	45	123.3 (90)	122.6 (80)
	Bremer	115	202.1 (24)	174.9 (14)	Mills	54	145.5 (75)	142.5 (55)
	Dallas	136	111.3 (95)	155.8 (36)	Polk	986	102.0 (98)	123.1 (79)
	Dubuque	338	153.0 (61)	147.6 (47)	Pottawattamie	233	107.3 (96)	109.2 (92)
	Grundy	60	198.6 (26)	157.8 (32)	Scott	534	136.3 (84)	147.3 (48)
	Guthrie	42	150.6 (63)	114.8 (88)	Story	197	93.0 (99)	137.0 (62)
	Harrison	68	178.3 (38)	156.0 (35)	Warren	124	119.3 (91)	126.4 (74)
	Johnson	310	104.2 (97)	158.7 (30)	Washington	93	182.0 (36)	160.6 (26)
	Jones	74	138.8 (82)	132.5 (68)	Woodbury	366	145.8 (73)	162.1 (25)
					Total	5,039	126.8	142.3
State Total		10,735	147.9	144.9				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Prostate Cancer Incidence by County Group 1978-2006

Prostate Cancer Mortality 2002-2006

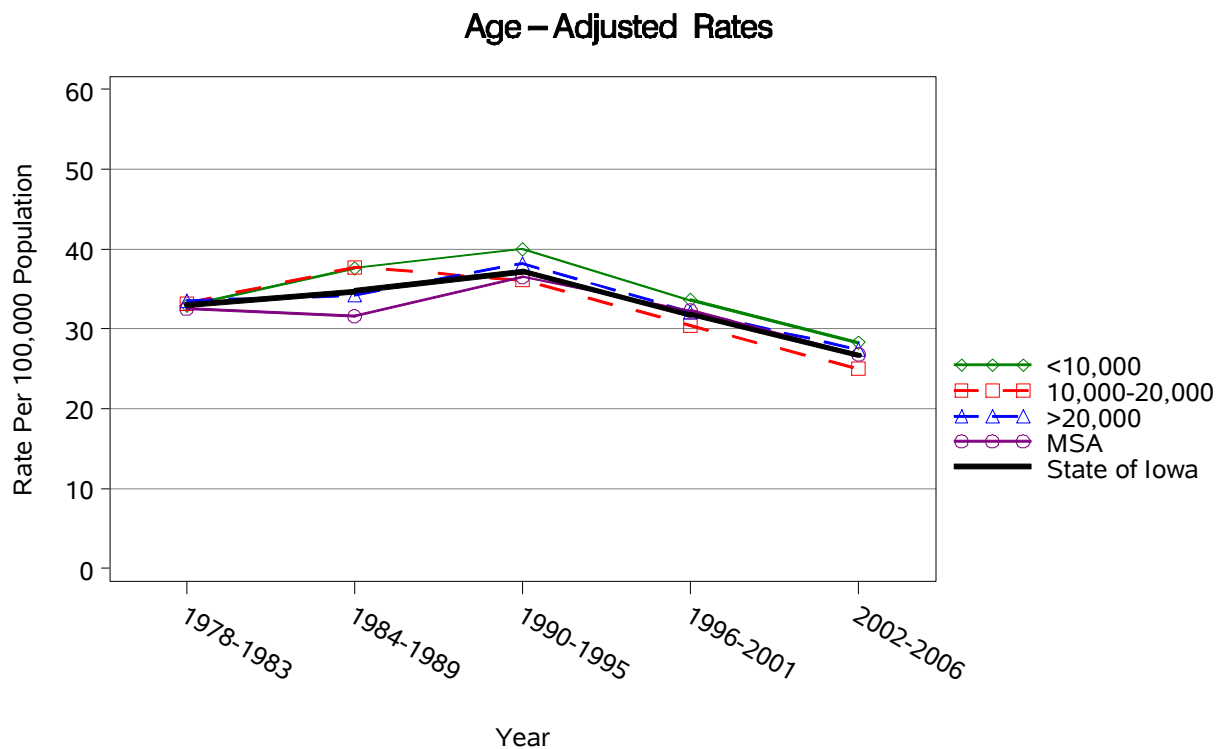
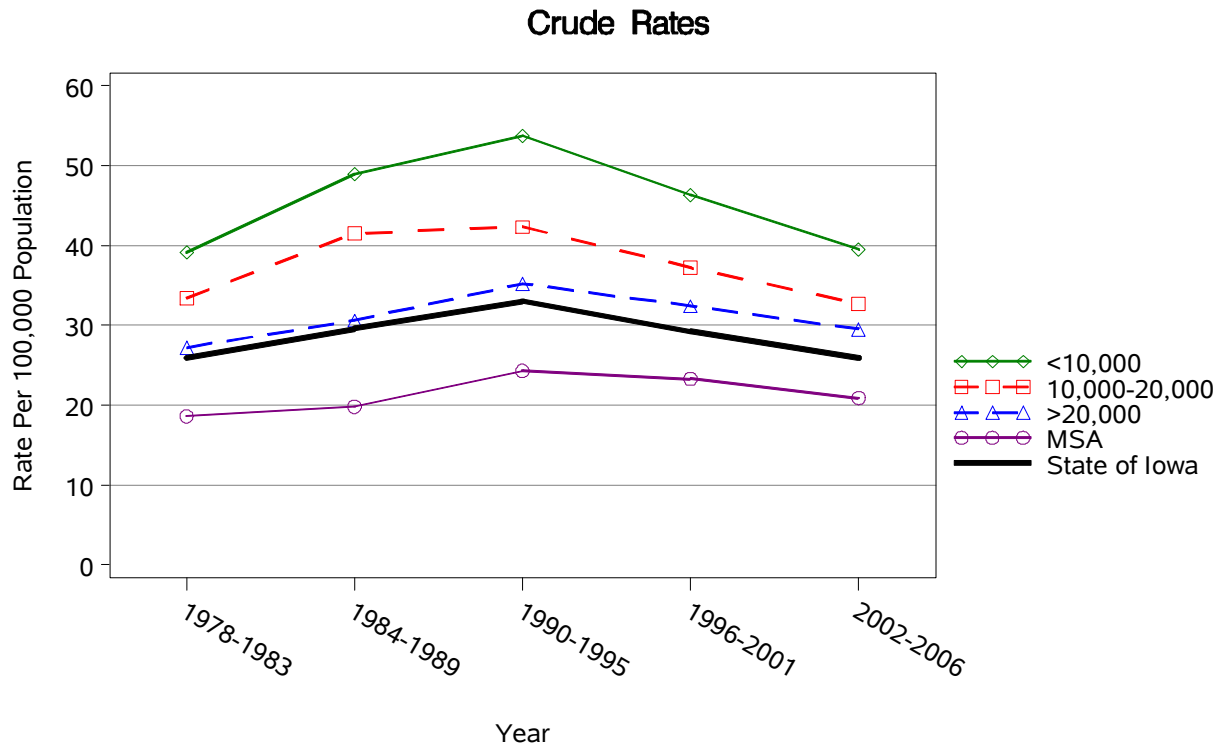
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	12	51.5	42.8
	Adams	*	*	*	Monona	17	73.6	46.8
	Audubon	11	71.8	48	Monroe	*	*	*
	Clarke	11	48.3	42.9	Osceola	*	*	*
	Davis	6	28.2	25	Palo Alto	16	67.4	47.1
	Decatur	6	28.8	24.2	Pocahontas	7	35.4	24.1
	Fremont	*	*	*	Ringgold	5	39.2	23.1
	Greene	9	37.2	24.5	Taylor	5	30.7	20.3
	Howard	5	20.8	15.8	Van Buren	14	73.1	49.6
	Humboldt	6	24.5	17.7	Wayne	10	64.3	38.8
	Ida	6	33.5	23.5	Worth	6	31.1	25.7
					Total	169	39.5	28.3
Counties with Average Population 10,000 – 20,000	Allamakee	9	24.6	20.8	Hardin	19	42.9	31.6
	Appanoose	8	24.9	17.3	Iowa	16	41.1	34.8
	Buena Vista	14	27.8	24.4	Jefferson	8	20.8	19.5
	Butler	10	27.3	20.5	Keokuk	8	29.6	21.4
	Calhoun	11	41.8	27.3	Kossuth	10	25.3	17.5
	Cass	6	17.5	12.5	Louisa	9	30.1	32.1
	Cedar	9	20.2	17.9	Lyon	5	17.4	14.1
	Cherokee	13	43.2	32.3	Mitchell	15	56.4	32.7
	Chickasaw	12	38.4	30.7	Montgomery	*	*	*
	Clay	12	29.2	23.2	O'Brien	5	14.1	9.8
	Clayton	16	35.7	27.4	Page	26	63.1	49.5
	Crawford	20	47.6	42.2	Poweshiek	14	30.9	25.1
	Delaware	9	20.3	18.2	Sac	10	37.8	25.1
	Dickinson	9	22.3	15.2	Shelby	10	32.2	22.5
	Emmet	12	46.1	34.9	Tama	18	40.8	32.1
	Floyd	13	32.5	24.2	Union	13	45.2	35
	Franklin	11	41.7	30.7	Winnebago	9	32.9	24.4
	Hamilton	12	30.1	23.3	Wright	12	35.8	23.5
	Hancock	11	38.2	28.9	Total	424-8	32.4-32.7	25
Counties with Average Population > 20,000	Boone	18	28	27.6	Lee	19	21	19.4
	Buchanan	11	21.2	21.1	Mahaska	10	18	16.9
	Carroll	13	25.4	19.8	Marion	27	33.5	30.8
	Cerro Gordo	33	30.6	26.2	Marshall	40	41.1	38.2
	Clinton	40	33.3	32.7	Muscatine	25	24	32.7
	Des Moines	30	30.2	27.6	Plymouth	16	26.1	23.8
	Fayette	21	40.2	30.2	Sioux	20	25.4	24.8
	Henry	18	35.1	36.4	Wapello	28	32	27.6
	Jackson	18	36.2	30.9	Webster	31	31.3	29.2
	Jasper	21	22.2	22	Winneshiek	17	32.9	28.1
					Total	456	29.5	27.4
MSA Counties	Benton	12	18.2	17.6	Linn	90	18.5	22.6
	Black Hawk	61	20	21.6	Madison	15	41.1	41.3
	Bremer	22	38.7	35.6	Mills	9	24.2	31.7
	Dallas	21	17.2	28.5	Polk	200	20.7	29.3
	Dubuque	55	24.9	27.2	Pottawattamie	52	23.9	27
	Grundy	14	46.3	36.4	Scott	71	18.1	24.2
	Guthrie	11	39.4	30.3	Story	44	20.8	32.2
	Harrison	13	34.1	30.4	Warren	25	24	31.3
	Johnson	34	11.4	23.9	Washington	13	25.4	21.1
	Jones	13	24.4	25.1	Woodbury	55	21.9	27
					Total	830	20.9	26.8
State Total		1,879-83	25.8-25.9	26.7				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Prostate Cancer Mortality by County Group 1978-2006



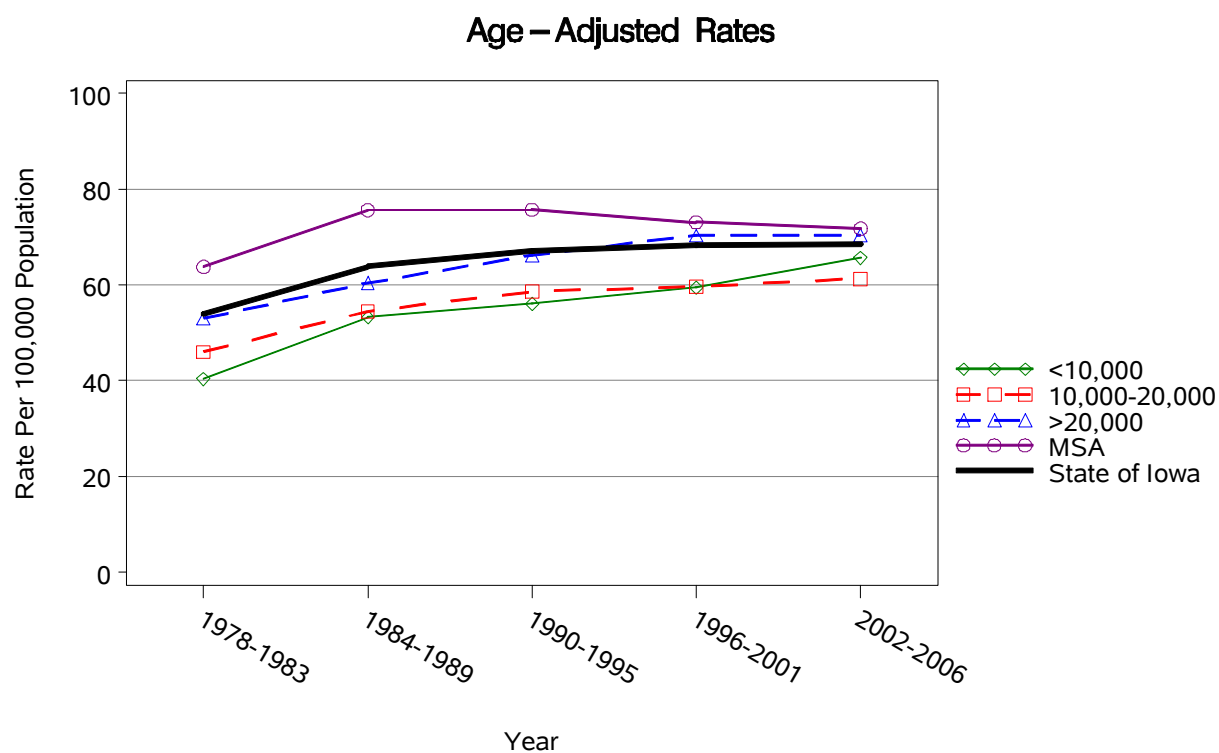
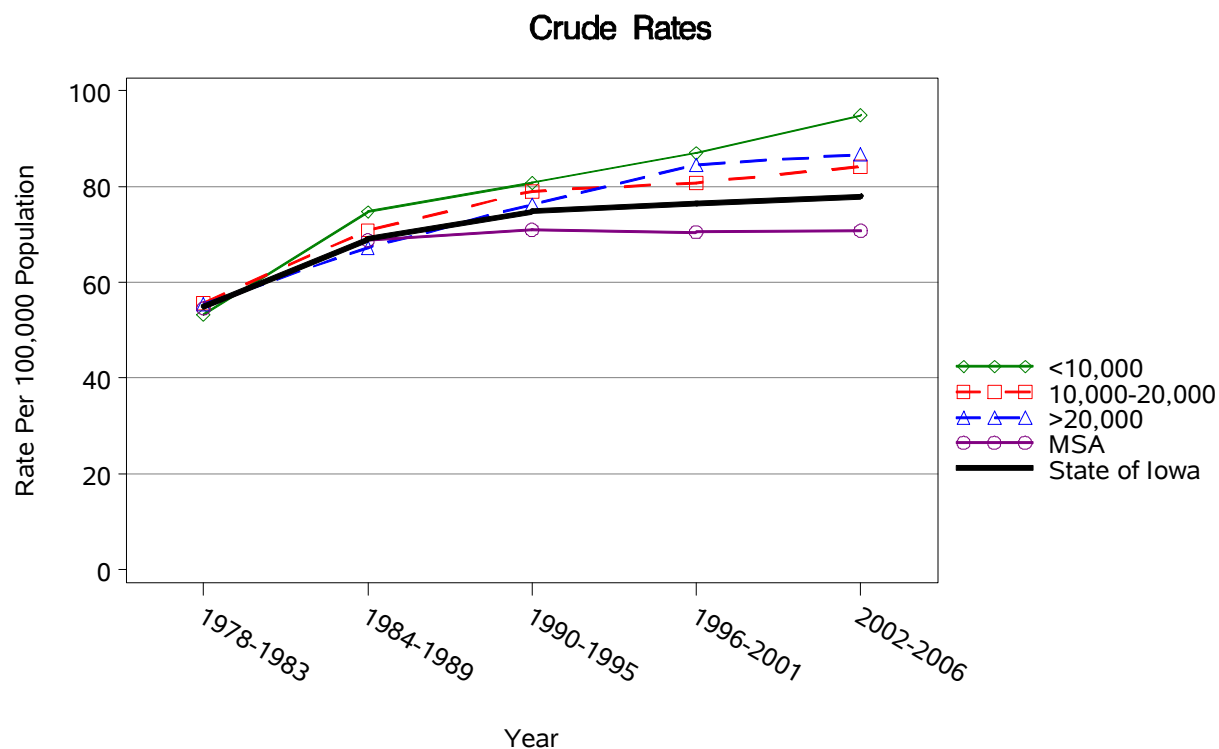
Lung Cancer Incidence 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	47	120.0 (06)	83.1 (05)	Lucas	35	73.5 (71)	55.3 (82)
	Adams	28	131.7 (02)	84.2 (04)	Monona	55	115.8 (07)	72.3 (29)
	Audubon	34	106.9 (14)	70.1 (35)	Monroe	47	121.2 (05)	89.6 (02)
	Clarke	30	65.5 (90)	53.8 (84)	Osceola	30	89.1 (35)	68.2 (44)
	Davis	30	70.3 (80)	57.8 (71)	Palo Alto	53	109.8 (11)	70.9 (33)
	Decatur	37	87.2 (41)	68.2 (44)	Pocahontas	39	97.5 (21)	61.7 (62)
	Fremont	31	81.0 (58)	56.2 (78)	Ringgold	36	137.6 (01)	82.6 (06)
	Greene	44	88.9 (36)	58.4 (70)	Taylor	28	84.0 (54)	58.6 (69)
	Howard	30	62.0 (92)	43.3 (96)	Van Buren	40	104.2 (15)	74.6 (22)
	Humboldt	56	112.8 (09)	75.7 (17)	Wayne	41	125.9 (03)	77.2 (13)
	Ida	31	85.0 (49)	50.6 (92)	Worth	24	62.1 (91)	46.8 (94)
					Total	826	94.9	65.7
Counties with Average Population 10,000 – 20,000	Allamakee	53	73.3 (72)	51.9 (86)	Hardin	82	91.0 (32)	65.1 (52)
	Appanoose	72	107.9 (13)	74.7 (21)	Iowa	64	80.6 (59)	65.3 (51)
	Buena Vista	69	69.3 (83)	59.5 (65)	Jefferson	54	68.9 (84)	57.1 (74)
	Butler	64	86.7 (44)	58.9 (68)	Keokuk	51	92.1 (31)	69.4 (37)
	Calhoun	53	101.8 (18)	65.6 (50)	Kossuth	70	86.8 (43)	57.3 (73)
	Cass	54	76.7 (63)	50.8 (91)	Louisa	52	86.6 (45)	78.5 (11)
	Cedar	69	76.5 (64)	61.3 (63)	Lyon	29	50.4 (95)	40.7 (97)
	Cherokee	60	98.3 (20)	62.4 (61)	Mitchell	41	75.7 (68)	51.4 (87)
	Chickasaw	65	104.2 (15)	74.8 (20)	Montgomery	48	85.7 (47)	64.2 (54)
	Clay	92	108.9 (12)	80.7 (07)	O'Brien	64	88.7 (38)	60.1 (64)
	Clayton	68	75.5 (69)	55.4 (81)	Page	78	96.7 (23)	68.9 (42)
	Crawford	60	71.9 (73)	55.9 (79)	Poweshiek	67	71.5 (75)	56.8 (75)
	Delaware	61	68.5 (85)	55.5 (80)	Sac	52	96.7 (23)	65.7 (49)
	Dickinson	74	89.7 (34)	57.8 (71)	Shelby	48	76.2 (65)	52.8 (85)
	Emmet	43	81.2 (57)	59.3 (67)	Tama	79	88.2 (40)	68.3 (43)
	Floyd	58	70.5 (79)	50.9 (89)	Union	56	93.4 (29)	67.1 (47)
	Franklin	54	101.8 (18)	69.4 (37)	Winnebago	40	71.2 (77)	50.3 (93)
	Hamilton	76	94.8 (26)	71.6 (31)	Wright	75	110.9 (10)	74.3 (24)
	Hancock	40	68.5 (85)	51.0 (88)	Total	2,235	84.2	61.3
Counties with Average Population > 20,000	Boone	116	88.4 (39)	75.7 (17)	Lee	188	103.4 (17)	80.4 (08)
	Buchanan	89	85.5 (48)	74.2 (25)	Mahaska	94	84.8 (50)	72.8 (28)
	Carroll	75	71.5 (75)	50.9 (89)	Marion	116	71.6 (74)	62.5 (60)
	Cerro Gordo	207	92.5 (30)	69.3 (39)	Marshall	165	84.3 (52)	67.0 (48)
	Clinton	234	94.7 (27)	76.4 (15)	Muscatine	156	74.4 (70)	72.1 (30)
	Des Moines	235	114.8 (08)	87.3 (03)	Plymouth	84	68.3 (87)	56.7 (76)
	Fayette	101	95.7 (25)	67.5 (46)	Sioux	60	37.6 (99)	33.0 (99)
	Henry	82	81.6 (56)	71.2 (32)	Wapello	219	122.5 (04)	96.7 (01)
	Jackson	85	84.6 (51)	63.4 (57)	Webster	190	97.3 (22)	79.8 (10)
	Jasper	167	89.8 (33)	73.0 (27)	Winnesiek	49	46.8 (96)	37.7 (98)
					Total	2,712	86.7	70.4
MSA Counties	Benton	88	66.7 (88)	59.4 (66)	Linn	779	78.4 (60)	78.0 (12)
	Black Hawk	480	75.8 (66)	69.5 (36)	Madison	62	84.2 (53)	75.7 (17)
	Bremer	66	56.4 (93)	44.2 (95)	Mills	49	66.3 (89)	64.1 (55)
	Dallas	135	54.7 (94)	69.2 (40)	Polk	1,387	69.8 (82)	76.1 (16)
	Dubuque	370	81.8 (55)	70.8 (34)	Pottawattamie	386	87.1 (42)	80.0 (09)
	Grundy	53	86.4 (46)	62.9 (59)	Scott	623	78.0 (61)	77.2 (13)
	Guthrie	50	88.9 (36)	63.1 (58)	Story	183	44.5 (97)	56.4 (77)
	Harrison	73	94.0 (28)	74.4 (23)	Warren	150	70.6 (78)	69.1 (41)
	Johnson	256	42.8 (98)	64.9 (53)	Washington	74	70.3 (80)	54.3 (83)
	Jones	78	76.9 (62)	64.0 (56)	Woodbury	388	75.8 (66)	74.1 (26)
					Total	5,730	70.8	71.8
	State Total	11,503	78	68.5				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Lung Cancer Incidence by County Group 1978-2006



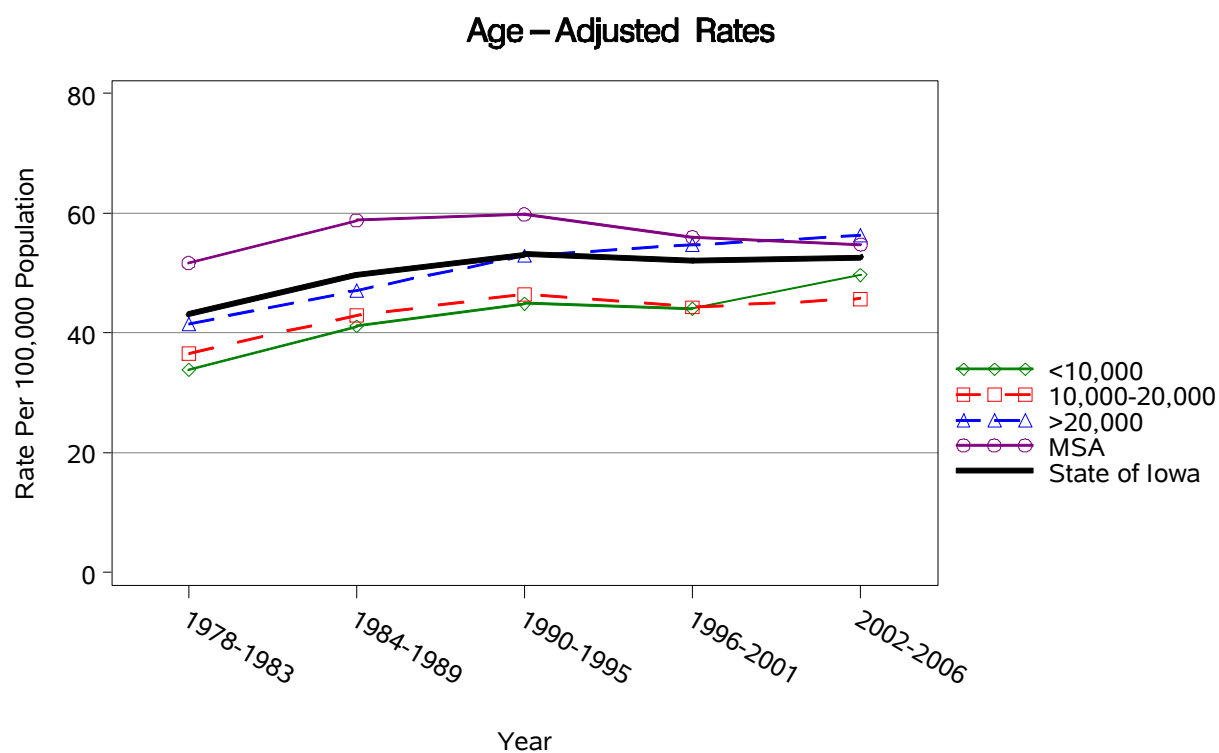
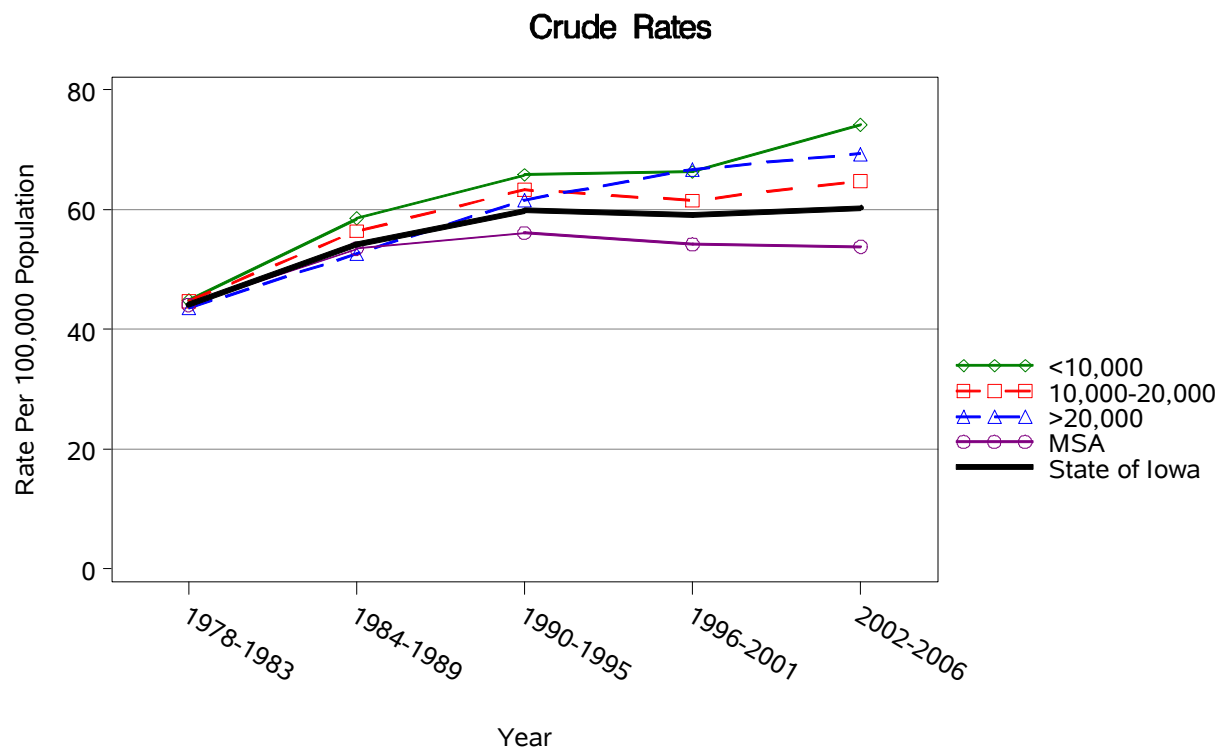
Lung Cancer Mortality 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	35	89.4 (07)	59.4 (16)	Lucas	28	58.8 (68)	44.9 (70)
	Adams	18	84.7 (13)	53.1 (37)	Monona	45	94.8 (02)	53.6 (36)
	Audubon	29	91.2 (06)	57.3 (21)	Monroe	34	87.7 (09)	63.9 (05)
	Clarke	27	58.9 (67)	49.7 (50)	Osceola	24	71.3 (35)	51.6 (43)
	Davis	21	49.2 (89)	39.7 (88)	Palo Alto	39	80.8 (16)	49.2 (54)
	Decatur	22	51.9 (85)	41.4 (81)	Pocahontas	32	80.0 (18)	52.1 (40)
	Fremont	31	81.0 (15)	55.5 (26)	Ringgold	25	95.5 (01)	55.0 (32)
	Greene	38	76.8 (24)	49.9 (49)	Taylor	20	60.0 (62)	42.2 (78)
	Howard	25	51.6 (86)	35.3 (95)	Van Buren	36	93.8 (03)	64.5 (04)
	Humboldt	33	66.4 (50)	44.9 (70)	Wayne	30	92.1 (04)	55.1 (30)
	Ida	26	71.3 (35)	43.2 (76)	Worth	28	72.5 (31)	54.1 (35)
					Total	646	74.2	50.4
Counties with Average Population 10,000 – 20,000	Allamakee	46	63.6 (58)	44.0 (72)	Hardin	72	79.9 (19)	55.0 (32)
	Appanoose	49	73.4 (29)	49.4 (52)	Iowa	42	52.9 (84)	42.3 (77)
	Buena Vista	43	43.2 (92)	35.8 (94)	Jefferson	40	51.0 (87)	41.8 (80)
	Butler	44	59.6 (64)	37.8 (91)	Keokuk	44	79.5 (20)	59.9 (13)
	Calhoun	45	86.4 (11)	52.4 (39)	Kossuth	54	67.0 (48)	44.0 (72)
	Cass	41	58.2 (72)	38.5 (90)	Louisa	40	66.6 (49)	60.5 (12)
	Cedar	52	57.7 (74)	46.4 (67)	Lyon	20	34.7 (95)	26.0 (99)
	Cherokee	41	67.2 (47)	39.9 (85)	Mitchell	33	60.9 (61)	41.0 (83)
	Chickasaw	45	72.1 (32)	51.6 (43)	Montgomery	37	66.1 (52)	47.1 (64)
	Clay	62	73.4 (29)	53.1 (37)	O'Brien	57	79.0 (22)	51.2 (45)
	Clayton	50	55.5 (79)	39.9 (85)	Page	57	70.6 (37)	51.1 (46)
	Crawford	60	71.9 (33)	56.3 (23)	Poweshiek	54	57.6 (75)	45.1 (69)
	Delaware	42	47.2 (90)	37.3 (93)	Sac	41	76.3 (25)	49.7 (50)
	Dickinson	53	64.3 (54)	40.5 (84)	Shelby	44	69.8 (40)	48.6 (59)
	Emmet	34	64.2 (55)	46.8 (66)	Tama	57	63.7 (56)	47.2 (63)
	Floyd	56	68.1 (45)	45.8 (68)	Union	48	80.1 (17)	57.8 (20)
	Franklin	36	67.8 (46)	43.6 (74)	Winnebago	32	57.0 (77)	39.8 (87)
	Hamilton	55	68.6 (42)	49.3 (53)	Wright	58	85.8 (12)	55.6 (25)
	Hancock	35	59.9 (63)	43.6 (74)	Total	1,719	64.8	46
Counties with Average Population > 20,000	Boone	87	66.3 (51)	55.1 (30)	Lee	144	79.2 (21)	59.5 (15)
	Buchanan	65	62.5 (59)	54.6 (34)	Mahaska	78	70.3 (38)	60.7 (11)
	Carroll	62	59.1 (65)	41.2 (82)	Marion	111	68.5 (43)	58.5 (17)
	Cerro Gordo	168	75.1 (28)	55.5 (26)	Marshall	136	69.5 (41)	55.3 (29)
	Clinton	188	76.1 (27)	61.5 (08)	Muscatine	136	64.9 (53)	62.4 (06)
	Des Moines	187	91.3 (05)	68.3 (02)	Plymouth	57	46.3 (91)	37.6 (92)
	Fayette	89	84.3 (14)	57.3 (21)	Sioux	50	31.3 (99)	27.3 (98)
	Henry	59	58.7 (69)	49.0 (57)	Wapello	159	88.9 (08)	69.1 (01)
	Jackson	64	63.7 (56)	47.1 (64)	Webster	149	76.3 (25)	60.8 (09)
	Jasper	144	77.4 (23)	62.2 (07)	Winnesiek	36	34.4 (96)	27.9 (97)
					Total	2,169	69.3	55.4
MSA Counties	Benton	72	54.6 (81)	47.9 (60)	Linn	565	56.8 (78)	56.3 (23)
	Black Hawk	362	57.1 (76)	51.9 (41)	Madison	40	54.4 (82)	47.4 (61)
	Bremer	50	42.7 (93)	32.5 (96)	Mills	43	58.2 (72)	55.5 (26)
	Dallas	96	38.9 (94)	49.1 (56)	Polk	1062	53.5 (83)	58.5 (17)
	Dubuque	265	58.6 (70)	50.0 (48)	Pottawattamie	317	71.5 (34)	65.6 (03)
	Grundy	43	70.1 (39)	47.4 (61)	Scott	467	58.5 (71)	58.1 (19)
	Guthrie	49	87.1 (10)	60.8 (09)	Story	130	31.6 (98)	39.6 (89)
	Harrison	53	68.2 (44)	51.9 (41)	Warren	105	49.4 (88)	49.2 (54)
	Johnson	201	33.6 (97)	50.7 (47)	Washington	58	55.1 (80)	42.2 (78)
	Jones	60	59.1 (65)	48.7 (58)	Woodbury	315	61.5 (60)	59.8 (14)
					Total	4,353	53.8	54.4
State Total		8,887	60.3	52.3				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Lung Cancer Mortality by County Group 1978-2006

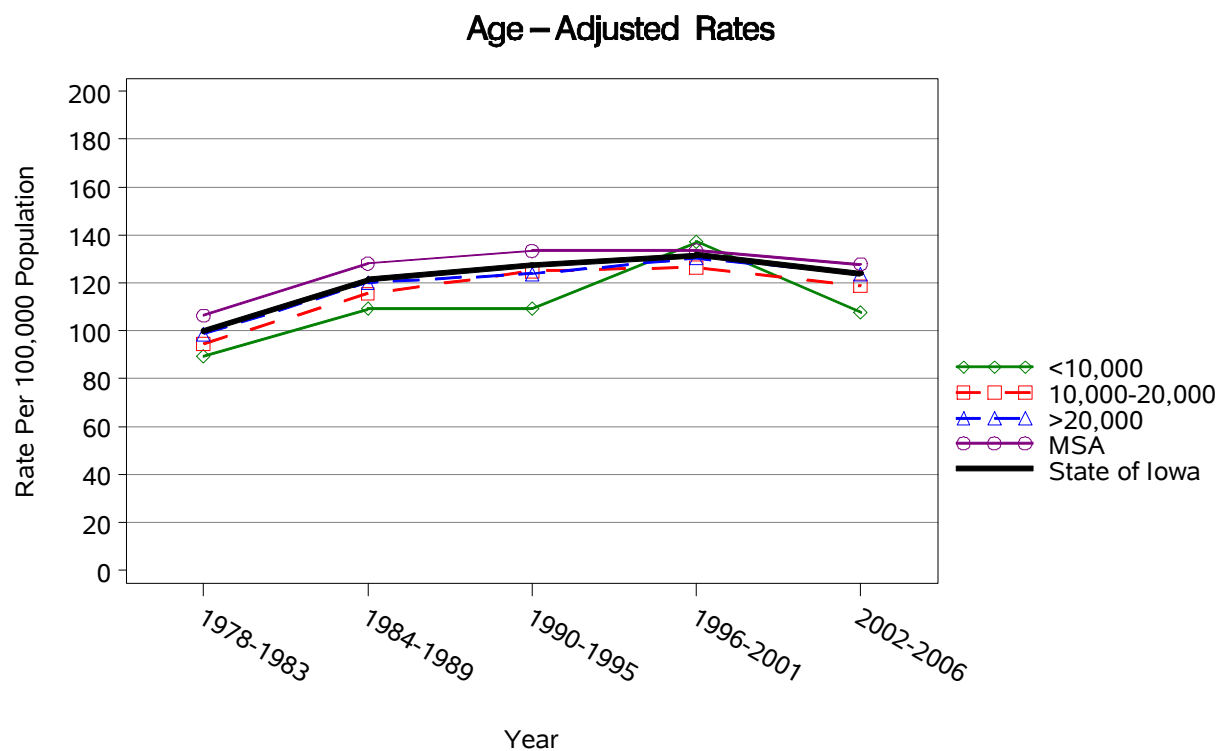
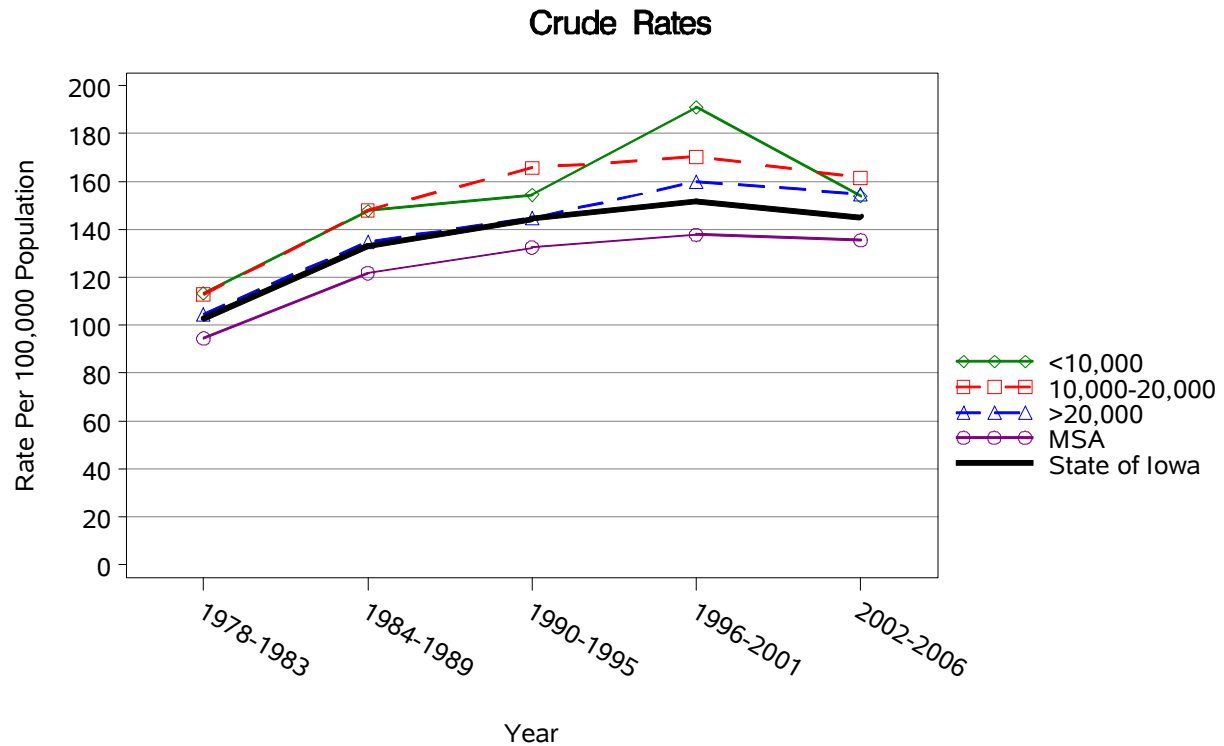


Female Breast Cancer Incidence 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	28	139.8 (68)	100.9 (85)	Lucas	34	139.7 (69)	95.8 (95)
	Adams	24	223.4 (02)	142.7 (09)	Monona	48	196.9 (07)	127.4 (32)
	Audubon	32	194.3 (08)	118.4 (40)	Monroe	26	131.5 (83)	94.4 (96)
	Clarke	30	130.3 (84)	108.2 (79)	Osceola	30	176.6 (19)	139.2 (11)
	Davis	15	70.0 (99)	61.0 (99)	Palo Alto	41	167.0 (34)	111.3 (69)
	Decatur	36	166.7 (36)	132.3 (23)	Pocahontas	35	173.2 (26)	96.3 (94)
	Fremont	32	165.9 (38)	115.2 (57)	Ringgold	24	179.0 (16)	128.2 (31)
	Greene	35	138.5 (72)	100.2 (88)	Taylor	25	146.4 (59)	100.6 (86)
	Howard	33	135.6 (76)	105.6 (82)	Van Buren	28	145.4 (61)	109.1 (75)
	Humboldt	43	170.5 (30)	112.6 (64)	Wayne	29	170.3 (31)	111.3 (69)
	Ida	31	166.8 (35)	114.6 (58)	Worth	22	113.8 (96)	82.1 (98)
					Total	681	154	107.8
Counties with Average Population 10,000 – 20,000	Allamakee	64	178.9 (17)	133.7 (19)	Hardin	81	176.7 (18)	118.5 (39)
	Appanoose	51	147.0 (56)	100.6 (86)	Iowa	54	133.4 (79)	108.4 (77)
	Buena Vista	68	138.0 (73)	111.8 (68)	Jefferson	51	127.8 (90)	98.6 (91)
	Butler	60	161.0 (43)	109.4 (74)	Keokuk	44	155.2 (47)	109.0 (76)
	Calhoun	52	202.2 (04)	116.3 (48)	Kossuth	71	172.8 (27)	116.3 (48)
	Cass	68	188.4 (10)	131.3 (24)	Louisa	39	129.2 (87)	116.9 (46)
	Cedar	76	166.6 (37)	133.8 (18)	Lyon	52	180.0 (14)	147.9 (04)
	Cherokee	51	165.0 (40)	115.6 (55)	Mitchell	67	243.0 (01)	182.2 (01)
	Chickasaw	54	173.3 (23)	133.0 (20)	Montgomery	50	169.9 (32)	113.0 (62)
	Clay	66	152.0 (50)	107.8 (80)	O'Brien	63	172.0 (28)	108.4 (77)
	Clayton	58	128.1 (89)	98.9 (90)	Page	75	190.1 (09)	134.1 (16)
	Crawford	61	147.3 (55)	118.2 (42)	Poweshiek	87	179.5 (15)	129.1 (28)
	Delaware	59	131.8 (82)	116.5 (47)	Sac	57	208.7 (03)	128.3 (30)
	Dickinson	74	175.6 (21)	118.1 (43)	Shelby	59	184.6 (13)	130.9 (25)
	Emmet	41	152.5 (49)	125.7 (34)	Tama	70	154.0 (48)	119.0 (38)
	Floyd	58	137.1 (74)	102.9 (84)	Union	54	173.3 (23)	121.7 (35)
	Franklin	47	176.3 (20)	115.9 (50)	Winnebago	43	149.4 (52)	100.0 (89)
	Hamilton	51	126.7 (92)	98.4 (93)	Wright	58	169.9 (32)	114.2 (61)
	Hancock	40	135.2 (77)	105.0 (83)	Total	2,174	161.7	118.7
Counties with Average Population > 20,000	Boone	96	143.7 (63)	112.8 (63)	Lee	138	150.8 (51)	110.1 (73)
	Buchanan	73	139.9 (66)	114.5 (59)	Mahaska	82	148.0 (53)	117.8 (45)
	Carroll	71	132.3 (80)	107.7 (81)	Marion	114	139.7 (69)	115.8 (51)
	Cerro Gordo	216	186.5 (12)	145.4 (05)	Marshall	172	174.8 (22)	137.0 (12)
	Clinton	207	163.2 (41)	132.5 (21)	Muscatine	136	128.8 (88)	115.5 (56)
	Des Moines	211	200.1 (06)	156.5 (02)	Plymouth	102	165.6 (39)	132.4 (22)
	Fayette	100	187.5 (11)	130.2 (26)	Sioux	105	129.9 (85)	117.9 (44)
	Henry	67	136.2 (75)	112.5 (65)	Wapello	143	156.6 (46)	121.2 (36)
	Jackson	88	173.3 (23)	134.3 (15)	Webster	137	142.0 (65)	112.4 (66)
	Jasper	132	144.2 (62)	112.1 (67)	Winneshiek	58	109.4 (97)	98.6 (91)
					Total	2,448	154.8	123.8
MSA Counties	Benton	97	146.7 (57)	126.1 (33)	Linn	705	139.2 (71)	129.2 (27)
	Black Hawk	416	126.7 (92)	115.7 (53)	Madison	48	129.4 (86)	110.4 (72)
	Bremer	103	171.5 (29)	139.4 (10)	Mills	58	157.7 (45)	135.3 (14)
	Dallas	174	139.9 (66)	150.0 (03)	Polk	1,347	132.1 (81)	129.1 (28)
	Dubuque	311	134.3 (78)	115.7 (53)	Pottawattamie	367	162.2 (42)	143.8 (07)
	Grundy	50	160.7 (44)	114.3 (60)	Scott	601	147.7 (54)	136.3 (13)
	Guthrie	57	201.0 (05)	143.5 (08)	Story	211	105.7 (98)	118.4 (40)
	Harrison	58	146.7 (57)	119.4 (37)	Warren	158	145.8 (60)	134.1 (16)
	Johnson	348	115.7 (95)	144.8 (06)	Washington	65	119.9 (94)	92.6 (97)
	Jones	69	143.4 (64)	111.3 (69)	Woodbury	333	127.6 (91)	115.8 (51)
					Total	5,576	135.5	127.9
State Total		10,879	145.4	124				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Female Breast Cancer Incidence by County Group 1978-2006

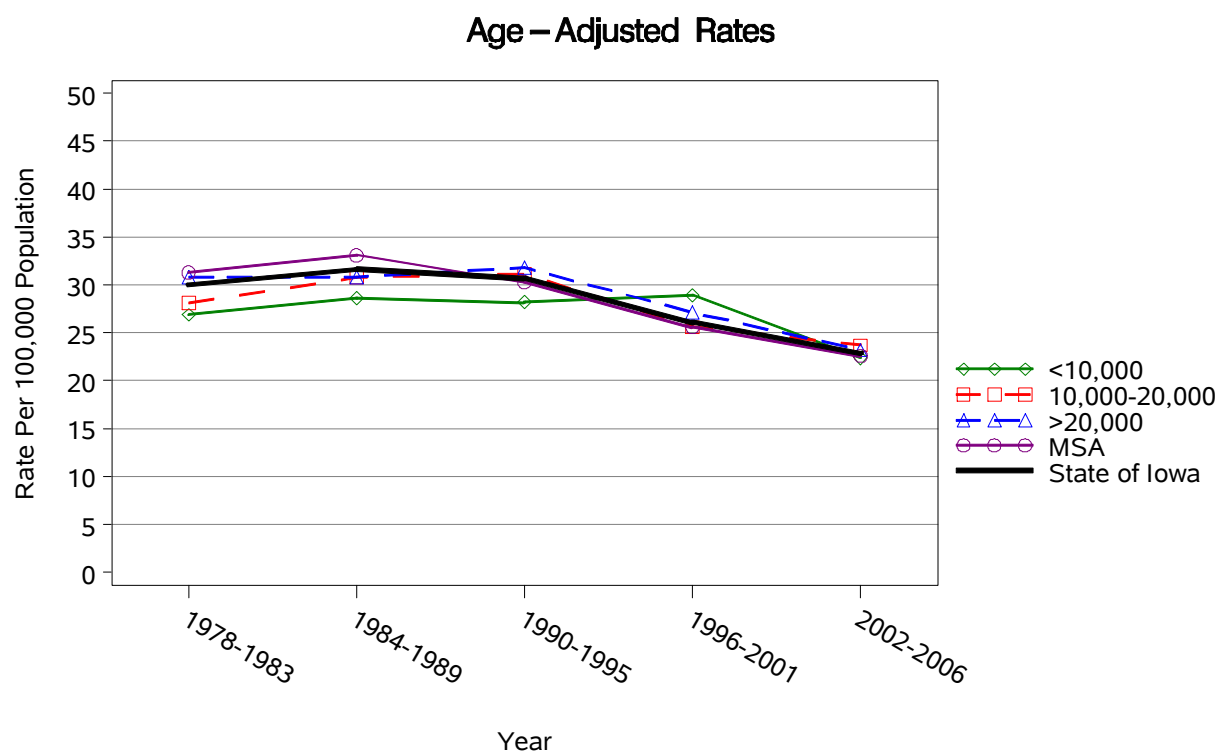
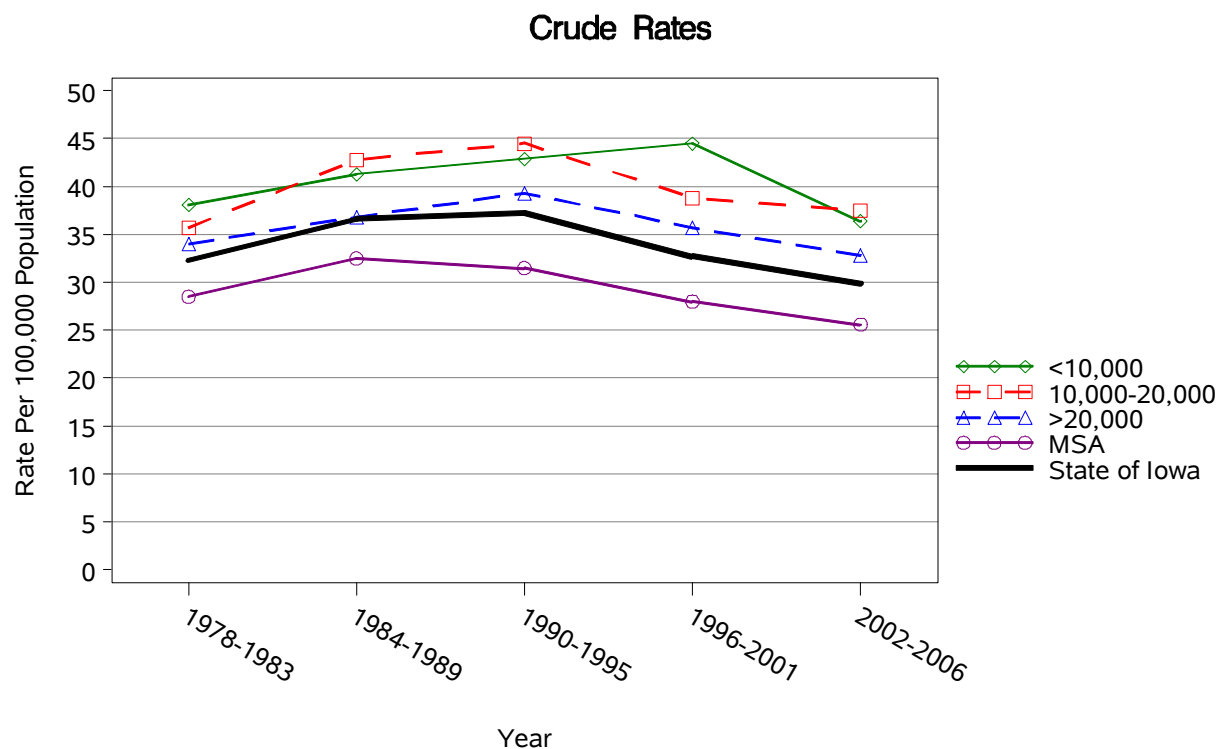
Female Breast Cancer Mortality 2002-2006

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	10	49.9	26.6	Lucas	12	49.3	31.5
	Adams	*	*	*	Monona	9	36.9	17.2
	Audubon	6	36.4	16.4	Monroe	6	30.3	21.2
	Clarke	6	26.1	19.1	Osceola	11	64.7	45.7
	Davis	*	*	*	Palo Alto	8	32.6	13.1
	Decatur	8	37	28.3	Pocahontas	10	49.5	31.2
	Fremont	7	36.3	24.9	Ringgold	*	*	*
	Greene	6	23.7	17.1	Taylor	5	29.3	14.1
	Howard	13	53.4	34.2	Van Buren	6	31.2	22
	Humboldt	9	35.7	18.2	Wayne	5	29.4	17.5
	Ida	11	59.2	32.3	Worth	*	*	*
					Total	161	36.4	22.4
Counties with Average Population 10,000 – 20,000	Allamakee	16	44.7	25.2	Hardin	27	58.9	34.6
	Appanoose	9	25.9	19.4	Iowa	14	34.6	23.5
	Buena Vista	12	24.4	18.6	Jefferson	14	35.1	25.3
	Butler	14	37.6	21.5	Keokuk	7	24.7	14.8
	Calhoun	9	35	15.6	Kossuth	17	41.4	25
	Cass	14	38.8	18.6	Louisa	13	43.1	32.3
	Cedar	13	28.5	22.2	Lyon	11	38.1	26.3
	Cherokee	12	38.8	21.3	Mitchell	13	47.2	31.5
	Chickasaw	8	25.7	17.1	Montgomery	14	47.6	29.4
	Clay	24	55.3	32.9	O'Brien	19	51.9	31.6
	Clayton	16	35.3	23.9	Page	19	48.2	29.3
	Crawford	10	24.1	14.5	Poweshiek	20	41.3	30.7
	Delaware	10	22.3	19	Sac	14	51.3	28.9
	Dickinson	7	16.6	8.3	Shelby	11	34.4	24.3
	Emmet	18	66.9	40.3	Tama	15	33	22.5
	Floyd	13	30.7	16.3	Union	12	38.5	22.7
	Franklin	15	56.3	26.8	Winnebago	12	41.7	30.9
	Hamilton	9	22.4	16.2	Wright	17	49.8	25.7
	Hancock	6	20.3	14.5	Total	504	37.5	23.7
Counties with Average Population > 20,000	Boone	21	31.4	23.5	Lee	32	35	23.6
	Buchanan	23	44.1	30.6	Mahaska	18	32.5	23.4
	Carroll	18	33.5	17.5	Marion	38	46.6	34.3
	Cerro Gordo	36	31.1	20.9	Marshall	30	30.5	22
	Clinton	40	31.5	23	Muscatine	37	35.1	29.4
	Des Moines	41	38.9	27.2	Plymouth	22	35.7	27.9
	Fayette	17	31.9	18.5	Sioux	17	21	13.3
	Henry	18	36.6	25.8	Wapello	25	27.4	18.2
	Jackson	14	27.6	19.7	Webster	31	32.1	23.7
	Jasper	30	32.8	22.6	Winneshiek	11	20.7	15.6
					Total	519	32.8	23.2
MSA Counties	Benton	11	16.6	13	Linn	122	24.1	21.1
	Black Hawk	87	26.5	21.9	Madison	15	40.4	33.9
	Bremer	23	38.3	24.6	Mills	17	46.2	39
	Dallas	38	30.5	31.9	Polk	238	23.3	22
	Dubuque	56	24.2	18.1	Pottawattamie	73	32.3	26.7
	Grundy	13	41.8	25.4	Scott	115	28.3	24.7
	Guthrie	6	21.2	14.4	Story	37	18.5	18.9
	Harrison	10	25.3	17.9	Warren	32	29.5	26.1
	Johnson	51	16.9	21	Washington	22	40.6	28.1
	Jones	15	31.2	22.2	Woodbury	74	28.4	22.7
					Total	1,055	25.6	22.6
State Total		2,239	29.9	22.9				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

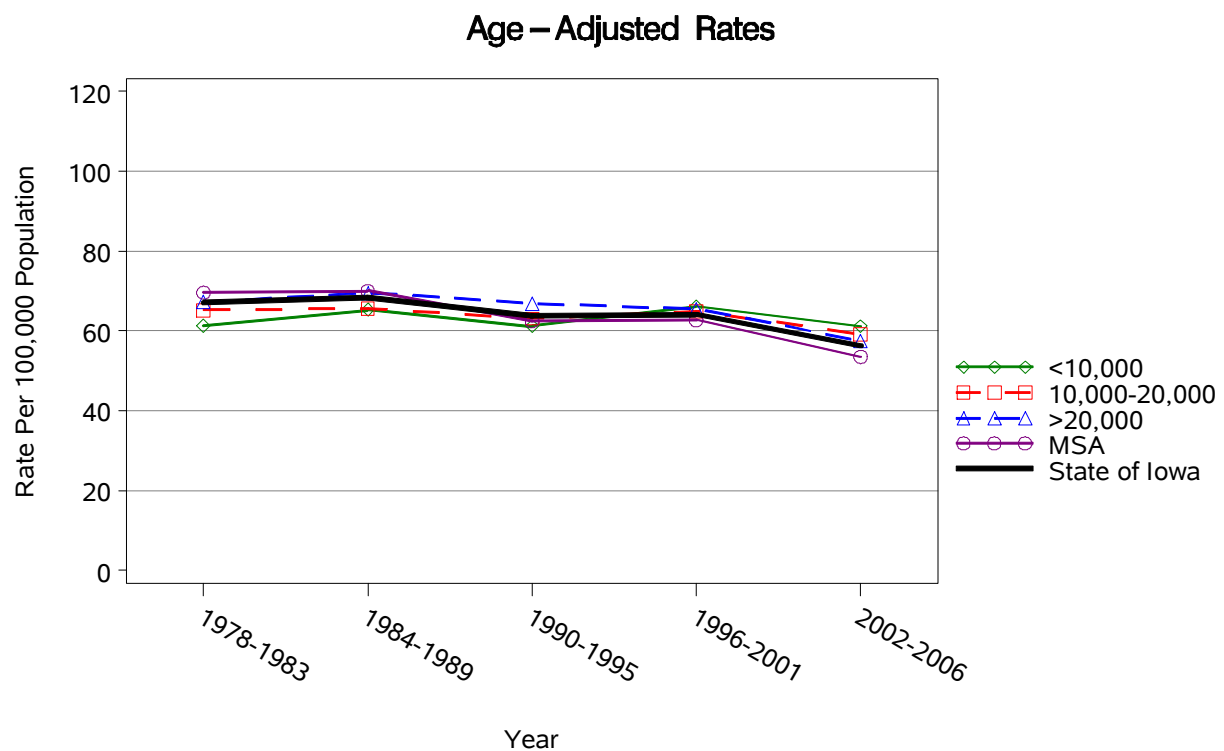
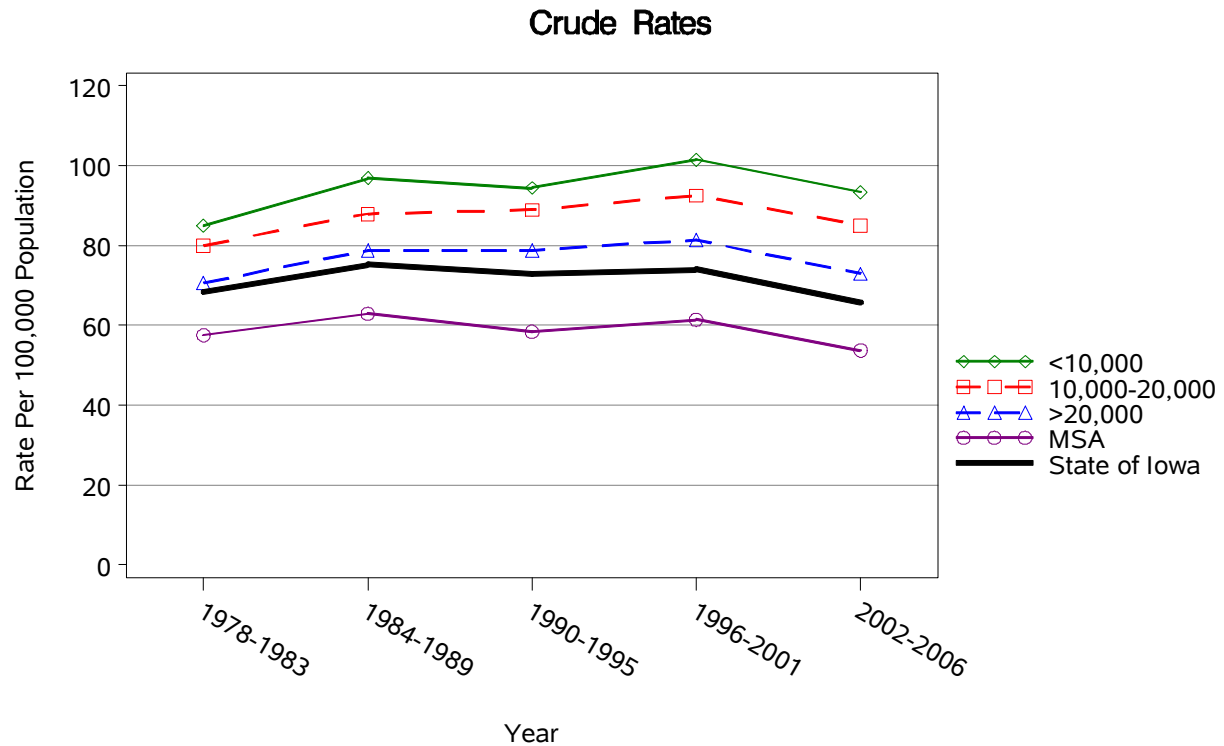
Female Breast Cancer Mortality by County Group 1978-2006

Colorectal Cancer Incidence 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	39	99.6 (15)	62.2 (30)	Lucas	47	98.7 (16)	68.8 (13)
	Adams	24	112.9 (07)	78.9 (04)	Monona	49	103.2 (11)	62.0 (32)
	Audubon	42	132.1 (01)	83.8 (01)	Monroe	39	100.6 (13)	65.1 (22)
	Clarke	39	85.1 (33)	65.4 (20)	Osceola	32	95.0 (20)	68.2 (15)
	Davis	34	79.6 (53)	57.0 (55)	Palo Alto	55	113.9 (06)	71.4 (07)
	Decatur	35	82.5 (40)	64.6 (24)	Pocahontas	49	122.5 (02)	70.0 (11)
	Fremont	29	75.7 (57)	53.9 (66)	Ringgold	21	80.2 (47)	48.2 (92)
	Greene	44	88.9 (28)	51.0 (80)	Taylor	27	81.0 (45)	49.0 (88)
	Howard	35	72.3 (69)	47.3 (96)	Van Buren	24	62.5 (81)	47.6 (94)
	Humboldt	52	104.7 (10)	67.9 (16)	Wayne	26	79.8 (50)	47.6 (94)
	Ida	39	106.9 (09)	62.7 (28)	Worth	32	82.8 (38)	56.4 (59)
					Total	813	93.4	61.2
Counties with Average Population 10,000 – 20,000	Allamakee	54	74.7 (63)	55.3 (62)	Hardin	62	68.8 (76)	43.7 (98)
	Appanoose	54	80.9 (46)	54.4 (64)	Iowa	74	93.2 (24)	71.3 (08)
	Buena Vista	72	72.3 (69)	57.1 (54)	Jefferson	47	60.0 (86)	48.4 (91)
	Butler	53	71.8 (71)	45.0 (97)	Keokuk	45	81.3 (44)	57.3 (52)
	Calhoun	61	117.2 (04)	68.5 (14)	Kossuth	73	90.5 (27)	59.8 (44)
	Cass	58	82.4 (41)	52.0 (74)	Louisa	26	43.3 (97)	35.9 (99)
	Cedar	72	79.9 (49)	61.9 (33)	Lyon	50	86.8 (32)	65.1 (22)
	Cherokee	62	101.6 (12)	64.2 (25)	Mitchell	52	96.0 (19)	64.2 (25)
	Chickasaw	52	83.3 (37)	61.6 (34)	Montgomery	52	92.8 (25)	58.9 (47)
	Clay	62	73.4 (64)	52.5 (71)	O'Brien	63	87.3 (31)	53.6 (67)
	Clayton	76	84.4 (36)	61.6 (34)	Page	92	114.0 (05)	79.0 (03)
	Crawford	78	93.5 (23)	69.0 (12)	Poweshiek	94	100.2 (14)	74.3 (05)
	Delaware	78	87.6 (30)	71.2 (09)	Sac	65	120.9 (03)	72.1 (06)
	Dickinson	78	94.6 (21)	58.5 (49)	Shelby	59	93.6 (22)	60.5 (42)
	Emmet	58	109.6 (08)	79.2 (02)	Tama	86	96.1 (18)	66.2 (19)
	Floyd	67	81.5 (43)	56.5 (58)	Union	45	75.1 (59)	51.8 (77)
	Franklin	47	88.6 (29)	58.6 (48)	Winnebago	37	65.9 (80)	49.9 (84)
	Hamilton	50	62.4 (82)	48.2 (92)	Wright	54	79.8 (50)	48.9 (90)
	Hancock	46	78.7 (54)	53.2 (70)	Total	2,254	85	59.2
Counties with Average Population > 20,000	Boone	92	70.1 (75)	55.7 (61)	Lee	136	74.8 (60)	56.6 (57)
	Buchanan	76	73.1 (65)	62.4 (29)	Mahaska	83	74.8 (60)	61.3 (38)
	Carroll	101	96.4 (17)	66.8 (17)	Marion	100	61.7 (83)	49.0 (88)
	Cerro Gordo	152	68.0 (78)	49.2 (87)	Marshall	143	73.1 (65)	56.3 (60)
	Clinton	204	82.6 (39)	65.2 (21)	Muscatine	110	52.5 (94)	49.8 (85)
	Des Moines	167	81.6 (42)	61.6 (34)	Plymouth	92	74.8 (60)	61.0 (39)
	Fayette	80	75.8 (56)	50.4 (82)	Sioux	128	80.2 (47)	71.1 (10)
	Henry	62	61.7 (83)	52.4 (72)	Wapello	128	71.6 (73)	56.7 (56)
	Jackson	79	78.6 (55)	58.2 (51)	Webster	133	68.1 (77)	54.0 (65)
	Jasper	135	72.6 (68)	58.5 (49)	Winnesiek	79	75.4 (58)	60.6 (41)
					Total	2,280	72.9	57.5
MSA Counties	Benton	93	70.5 (74)	60.4 (43)	Linn	533	53.6 (91)	52.1 (73)
	Black Hawk	363	57.3 (89)	52.0 (74)	Madison	44	59.8 (87)	53.6 (67)
	Bremer	84	71.8 (71)	57.2 (53)	Mills	41	55.5 (90)	53.5 (69)
	Dallas	130	52.7 (92)	66.7 (18)	Polk	951	47.9 (96)	51.9 (76)
	Dubuque	276	61.0 (85)	51.3 (79)	Pottawattamie	294	66.3 (79)	60.9 (40)
	Grundy	52	84.8 (35)	63.1 (27)	Scott	420	52.6 (93)	51.7 (78)
	Guthrie	52	92.4 (26)	61.5 (37)	Story	170	41.3 (98)	50.7 (81)
	Harrison	66	85.0 (34)	62.2 (30)	Warren	109	51.3 (95)	50.2 (83)
	Johnson	207	34.6 (99)	49.4 (86)	Washington	84	79.8 (50)	59.1 (46)
	Jones	74	72.9 (67)	59.4 (45)	Woodbury	297	58.0 (88)	55.2 (63)
					Total	4,340	53.7	53.5
State Total		9,687	65.7	56.3				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

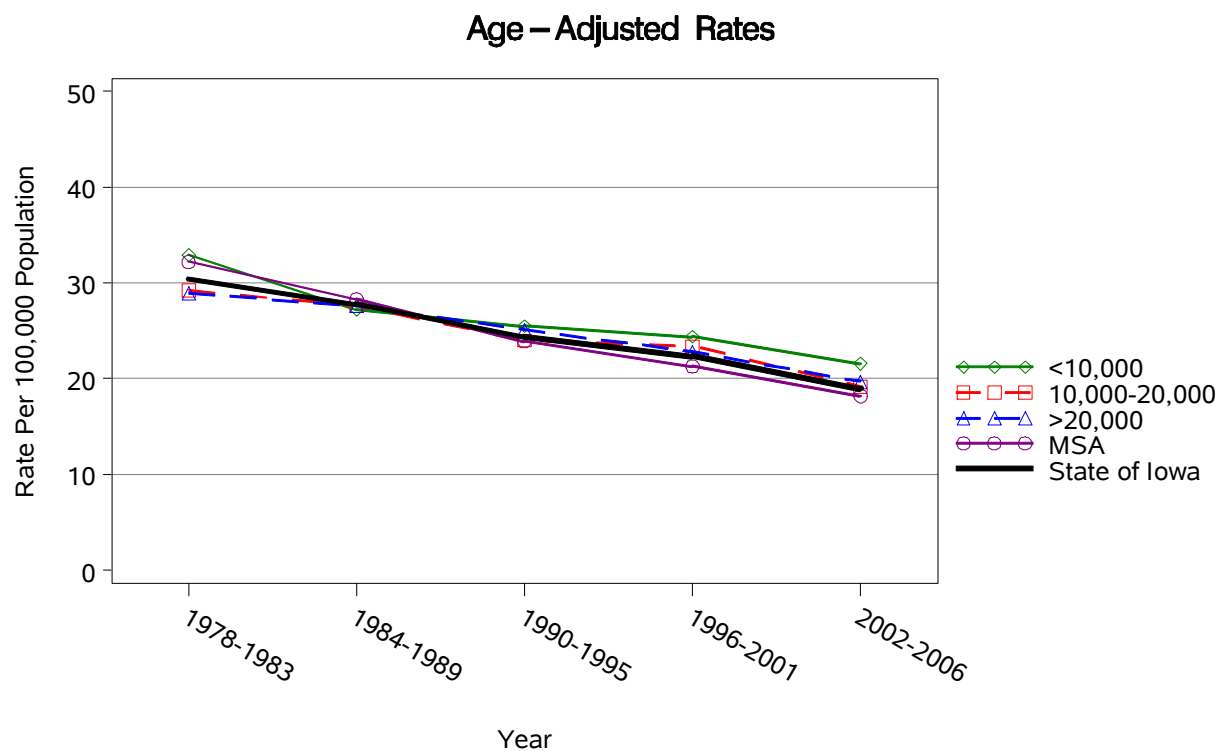
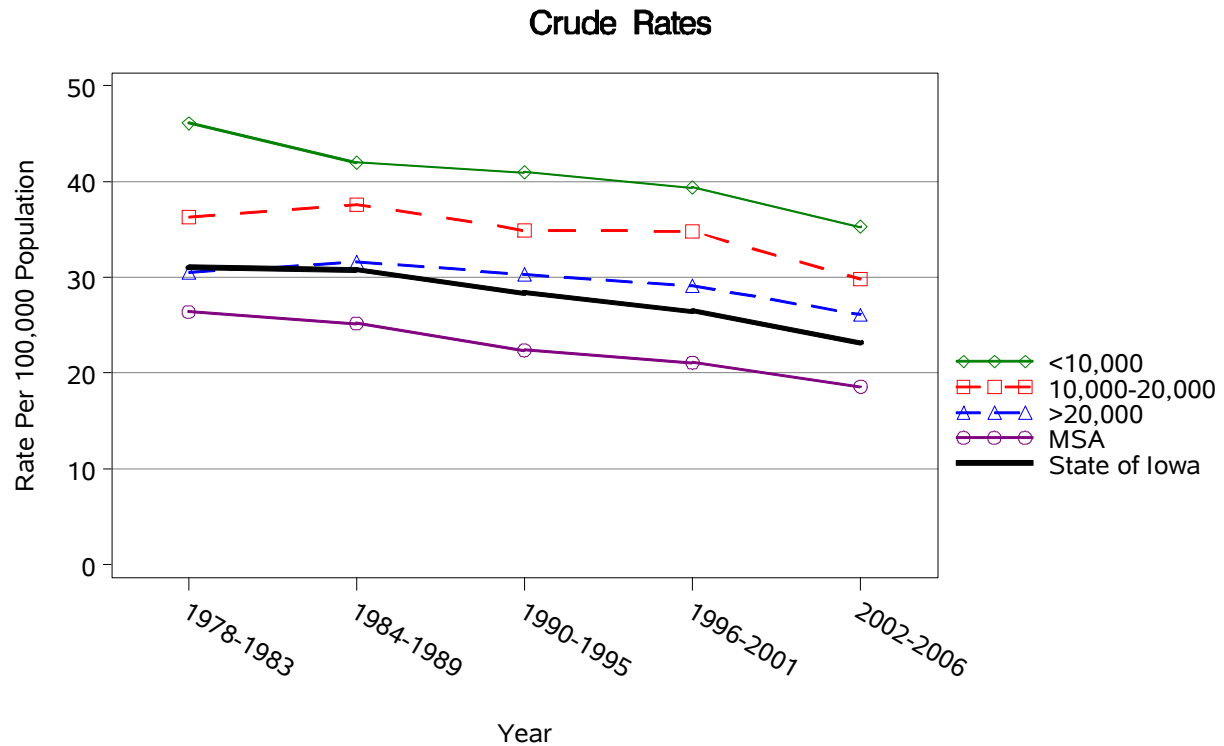
Colorectal Cancer Incidence by County Group 1978-2006

Colorectal Cancer Mortality 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	19	48.5 (03)	30.0 (03)	Lucas	13	27.3 (51)	16.9 (65)
	Adams	5	23.5 (69)	13.6 (91)	Monona	17	35.8 (22)	19.1 (51)
	Audubon	15	47.2 (04)	24.8 (14)	Monroe	14	36.1 (19)	23.5 (23)
	Clarke	14	30.6 (37)	23.8 (20)	Osceola	7	20.8 (78)	13.9 (89)
	Davis	11	25.8 (58)	17.8 (58)	Palo Alto	18	37.3 (16)	22.7 (28)
	Decatur	12	28.3 (45)	22.1 (34)	Pocahontas	16	40.0 (11)	21.5 (37)
	Fremont	13	34.0 (27)	22.1 (34)	Ringgold	12	45.9 (06)	27.1 (07)
	Greene	15	30.3 (39)	14.9 (82)	Taylor	11	33.0 (28)	18.6 (54)
	Howard	20	41.3 (08)	24.6 (15)	Van Buren	9	23.4 (71)	16.1 (73)
	Humboldt	19	38.3 (14)	23.5 (23)	Wayne	15	46.1 (05)	25.4 (11)
	Ida	13	35.6 (23)	19.2 (50)	Worth	19	49.2 (02)	32.0 (01)
					Total	307	35.3	21.6
Counties with Average Population 10,000 – 20,000	Allamakee	22	30.4 (38)	21.0 (40)	Hardin	22	24.4 (67)	15.6 (79)
	Appanoose	19	28.5 (44)	17.2 (62)	Iowa	21	26.5 (57)	18.0 (57)
	Buena Vista	31	31.1 (34)	23.6 (22)	Jefferson	12	15.3 (94)	12.7 (94)
	Butler	23	31.1 (34)	18.5 (55)	Keokuk	10	18.1 (89)	10.6 (98)
	Calhoun	17	32.7 (30)	15.9 (76)	Kossuth	18	22.3 (73)	11.8 (97)
	Cass	21	29.8 (41)	18.2 (56)	Louisa	17	28.3 (45)	23.5 (23)
	Cedar	23	25.5 (60)	18.9 (53)	Lyon	19	33.0 (28)	23.8 (20)
	Cherokee	15	24.6 (65)	14.6 (85)	Mitchell	20	36.9 (17)	24.2 (18)
	Chickasaw	25	40.1 (09)	28.6 (04)	Montgomery	14	25.0 (63)	16.0 (75)
	Clay	16	18.9 (84)	12.6 (95)	O'Brien	20	27.7 (49)	15.8 (77)
	Clayton	24	26.6 (54)	17.6 (59)	Page	26	32.2 (32)	19.6 (48)
	Crawford	27	32.4 (31)	22.7 (28)	Poweshiek	32	34.1 (26)	25.4 (11)
	Delaware	32	35.9 (20)	27.7 (05)	Sac	34	63.2 (01)	31.8 (02)
	Dickinson	33	40.0 (11)	22.8 (27)	Shelby	24	38.1 (15)	22.5 (32)
	Emmet	19	35.9 (20)	24.4 (16)	Tama	35	39.1 (13)	25.1 (13)
	Floyd	21	25.5 (60)	14.7 (83)	Union	26	43.4 (07)	27.5 (06)
	Franklin	12	22.6 (72)	14.4 (87)	Winnebago	8	14.2 (96)	8.9 (99)
	Hamilton	17	21.2 (77)	15.5 (80)	Wright	18	26.6 (54)	14.5 (86)
	Hancock	18	30.8 (36)	20.4 (44)	Total	791	29.8	19.2
Counties with Average Population > 20,000	Boone	28	21.3 (76)	17.1 (64)	Lee	51	28.0 (48)	20.7 (42)
	Buchanan	28	26.9 (52)	22.5 (32)	Mahaska	17	15.3 (94)	13.1 (92)
	Carroll	42	40.1 (09)	25.8 (09)	Marion	49	30.2 (40)	22.7 (28)
	Cerro Gordo	43	19.2 (82)	13.0 (93)	Marshall	69	35.3 (25)	26.3 (08)
	Clinton	71	28.7 (42)	21.8 (36)	Muscatine	53	25.3 (62)	24.4 (16)
	Des Moines	50	24.4 (67)	16.8 (67)	Plymouth	27	22.0 (75)	16.8 (67)
	Fayette	29	27.5 (50)	16.6 (70)	Sioux	32	20.1 (80)	17.2 (62)
	Henry	25	24.9 (64)	20.3 (46)	Wapello	48	26.8 (53)	19.6 (48)
	Jackson	37	36.8 (18)	25.6 (10)	Webster	39	20.0 (81)	14.7 (83)
	Jasper	48	25.8 (58)	20.4 (44)	Winneshiek	30	28.6 (43)	21.2 (39)
					Total	816	26.1	19.7
MSA Counties	Benton	25	19.0 (83)	15.3 (81)	Linn	175	17.6 (93)	16.8 (67)
	Black Hawk	120	18.9 (84)	16.1 (73)	Madison	13	17.7 (92)	14.3 (88)
	Bremer	21	18.0 (90)	13.7 (90)	Mills	10	13.5 (98)	12.4 (96)
	Dallas	46	18.7 (86)	23.5 (23)	Polk	366	18.4 (87)	19.7 (47)
	Dubuque	92	20.3 (79)	16.2 (71)	Pottawattamie	104	23.5 (69)	21.3 (38)
	Grundy	15	24.5 (66)	16.9 (65)	Scott	142	17.8 (91)	17.5 (61)
	Guthrie	20	35.6 (23)	22.7 (28)	Story	56	13.6 (97)	16.2 (71)
	Harrison	22	28.3 (45)	20.9 (41)	Warren	39	18.4 (87)	17.6 (59)
	Johnson	62	10.4 (99)	15.8 (77)	Washington	28	26.6 (54)	19.0 (52)
	Jones	32	31.5 (33)	24.0 (19)	Woodbury	113	22.1 (74)	20.7 (42)
					Total	1,501	18.6	18.2
State Total		3,415	23.2	19				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Colorectal Cancer Mortality by County Group 1978-2006

Non-Hodgkin's Lymphoma Incidence 2002-2006

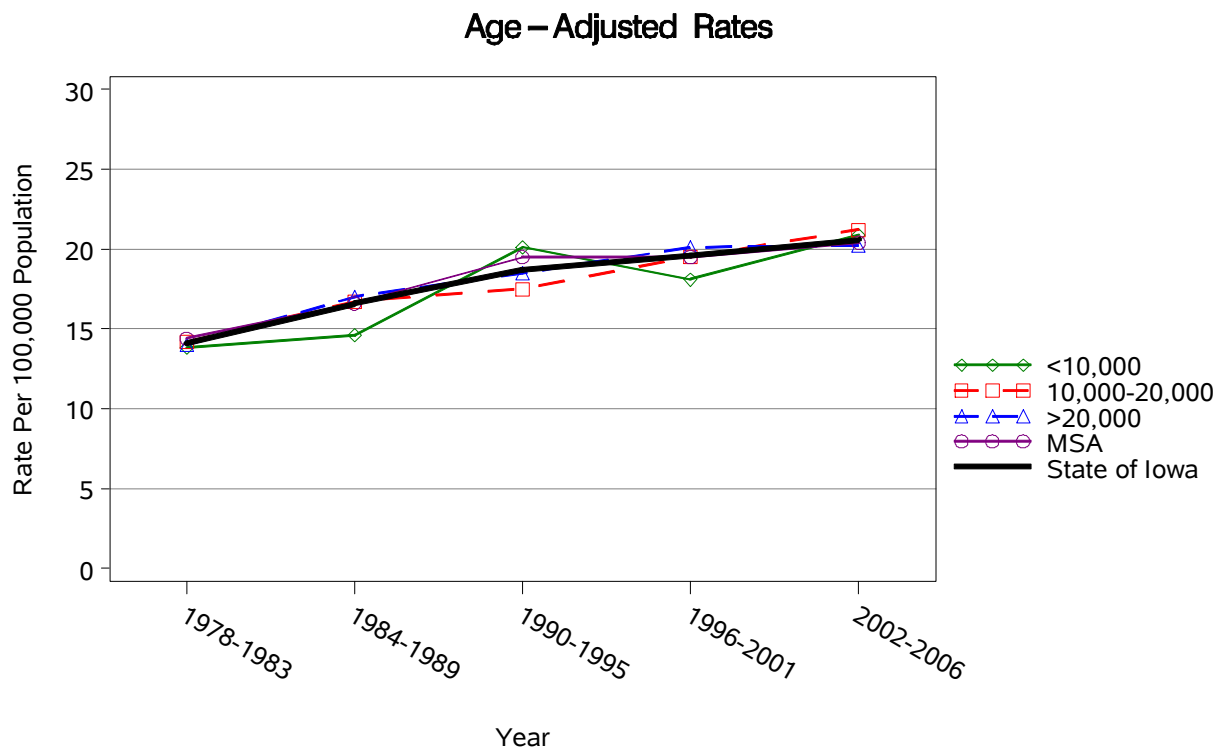
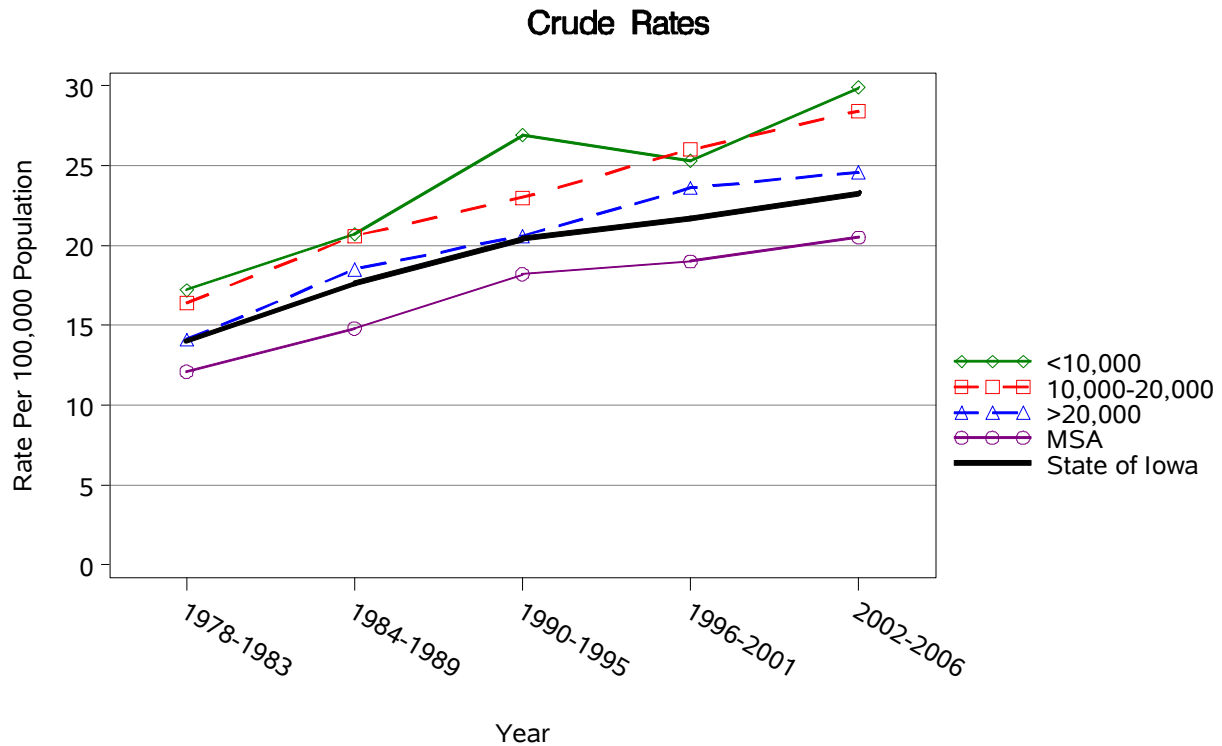
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	8	20.4	17.3	Lucas	9	18.9	13.6
	Adams	*	*	*	Monona	19	40	24.3
	Audubon	11	34.6	21.9	Monroe	12	31	24.3
	Clarke	6	13.1	11.5	Osceola	16	47.5	33.6
	Davis	12	28.1	23.9	Palo Alto	14	29	19
	Decatur	13	30.7	25.2	Pocahontas	15	37.5	23.1
	Fremont	8	20.9	18	Ringgold	8	30.6	19.8
	Greene	15	30.3	20.4	Taylor	13	39	26.6
	Howard	14	28.9	19.9	Van Buren	10	26	18.4
	Humboldt	17	34.2	22.8	Wayne	17	52.2	32.4
	Ida	10	27.4	16.8	Worth	9	23.3	16.7
					Total	256-60	29.4-29.9	20.9
Counties with Average Population 10,000 – 20,000	Allamakee	15	20.7	15	Hardin	34	37.7	26.1
	Appanoose	20	30	21.8	Iowa	32	40.3	30.8
	Buena Vista	21	21.1	16.6	Jefferson	10	12.8	11.6
	Butler	24	32.5	23.3	Keokuk	16	28.9	21.4
	Calhoun	14	26.9	19.5	Kossuth	27	33.5	22.7
	Cass	18	25.6	17.3	Louisa	11	18.3	16.4
	Cedar	31	34.4	29.2	Lyon	13	22.6	18.9
	Cherokee	17	27.9	18.2	Mitchell	13	24	15.5
	Chickasaw	13	20.8	16.8	Montgomery	14	25	19.9
	Clay	32	37.9	30.2	O'Brien	37	51.3	34.4
	Clayton	23	25.5	21.5	Page	26	32.2	20.8
	Crawford	23	27.6	23.1	Poweshiek	20	21.3	18.5
	Delaware	20	22.5	19.3	Sac	18	33.5	23
	Dickinson	30	36.4	23.6	Shelby	10	15.9	11
	Emmet	15	28.3	23.8	Tama	24	26.8	20.4
	Floyd	31	37.7	27.6	Union	17	28.4	21.1
	Franklin	18	33.9	25.7	Winnebago	13	23.1	13.6
	Hamilton	17	21.2	14.7	Wright	19	28.1	19.1
	Hancock	17	29.1	22.9	Total	753	28.4	21.2
Counties with Average Population > 20,000	Boone	29	22.1	19.2	Lee	44	24.2	18.8
	Buchanan	29	27.9	25.7	Mahaska	24	21.6	18.3
	Carroll	32	30.5	23.2	Marion	33	20.4	17.6
	Cerro Gordo	69	30.8	22.8	Marshall	44	22.5	18
	Clinton	50	20.2	17	Muscatine	40	19.1	18
	Des Moines	61	29.8	23.1	Plymouth	31	25.2	21.2
	Fayette	32	30.3	21.8	Sioux	35	21.9	19.5
	Henry	25	24.9	22.2	Wapello	54	30.2	23.8
	Jackson	27	26.9	22.5	Webster	41	21	17.4
	Jasper	46	24.7	20.7	Winnesiek	24	22.9	18.2
					Total	770	24.6	20.2
MSA Counties	Benton	24	18.2	16.1	Linn	215	21.6	21
	Black Hawk	154	24.3	22	Madison	15	20.4	16.8
	Bremer	23	19.7	15.5	Mills	17	23	21.6
	Dallas	50	20.3	23.4	Polk	350	17.6	18.6
	Dubuque	113	25	22.2	Pottawattamie	89	20.1	18.7
	Grundy	16	26.1	20	Scott	180	22.5	22.4
	Guthrie	10	17.8	13.5	Story	75	18.2	21.9
	Harrison	28	36	28.6	Warren	36	17	16.8
	Johnson	95	15.9	22.9	Washington	32	30.4	22.8
	Jones	33	32.5	28.1	Woodbury	102	19.9	19.2
					Total	1,657	20.5	20.4
State Total		3,436-40	23.3-23.4	20.6				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Non-Hodgkin's Lymphoma Incidence by County Group 1978-2006



Non-Hodgkin's Lymphoma Mortality 2002-2006

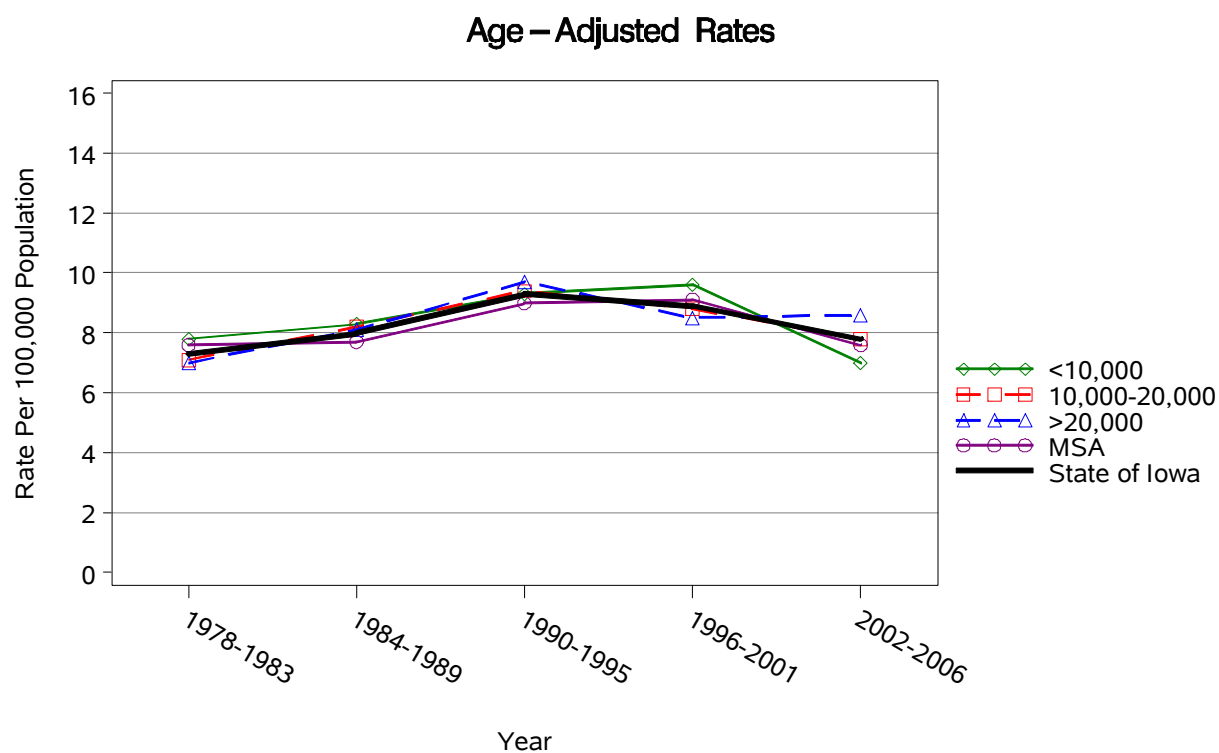
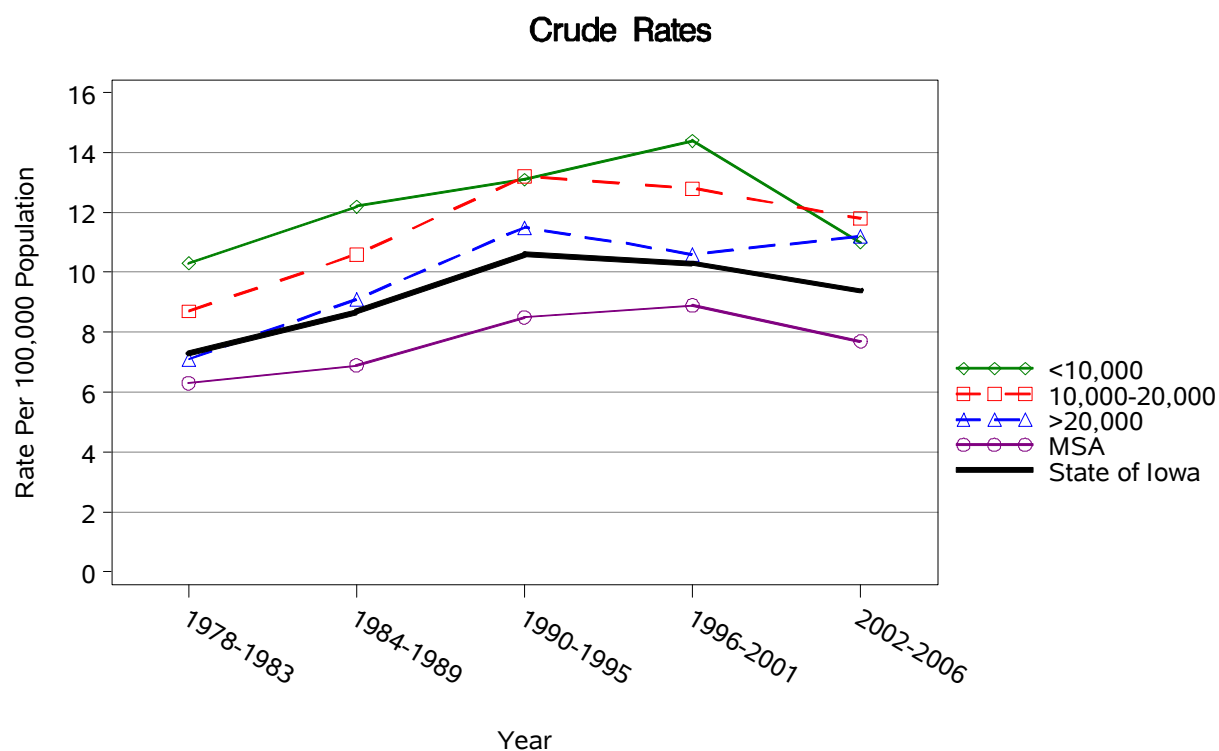
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	9	23	14.1	Lucas	*	*	*
	Adams	*	*	*	Monona	6	12.6	7.6
	Audubon	5	15.7	9.3	Monroe	*	*	*
	Clarke	5	10.9	9.4	Osceola	5	14.8	10.5
	Davis	7	16.4	12.4	Palo Alto	*	*	*
	Decatur	5	11.8	8	Pocahontas	6	15	7.3
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	8	16.5	10.1	Van Buren	*	*	*
	Humboldt	6	12.1	8.2	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	96	11	7
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	13	14.4	8.6
	Appanoose	5	7.5	4.7	Iowa	16	20.2	12.8
	Buena Vista	14	14.1	10.2	Jefferson	9	11.5	9.7
	Butler	7	9.5	6.3	Keokuk	6	10.8	6.6
	Calhoun	7	13.4	9.1	Kossuth	12	14.9	9.4
	Cass	12	17	11.8	Louisa	*	*	*
	Cedar	9	10	6.9	Lyon	5	8.7	6.7
	Cherokee	7	11.5	7.5	Mitchell	*	*	*
	Chickasaw	7	11.2	7.3	Montgomery	6	10.7	6.4
	Clay	12	14.2	10.2	O'Brien	17	23.6	14
	Clayton	9	10	6.2	Page	11	13.6	6.8
	Crawford	5	6	4.5	Poweshiek	8	8.5	6.2
	Delaware	8	9	7.2	Sac	*	*	*
	Dickinson	12	14.6	8.8	Shelby	7	11.1	6.5
	Emmet	*	*	*	Tama	7	7.8	5.1
	Floyd	12	14.6	10.3	Union	6	10	6.6
	Franklin	5	9.4	7.4	Winnebago	7	12.5	6.6
	Hamilton	13	16.2	10.7	Wright	8	11.8	6.9
	Hancock	10	17.1	11.7	Total	312	11.8	7.8
Counties with Average Population > 20,000	Boone	17	13	9.8	Lee	18	9.9	7.9
	Buchanan	16	15.4	13.4	Mahaska	8	7.2	5.8
	Carroll	14	13.4	8.4	Marion	16	9.9	7.3
	Cerro Gordo	24	10.7	7.5	Marshall	17	8.7	6.8
	Clinton	22	8.9	6.6	Muscatine	22	10.5	9.7
	Des Moines	30	14.7	10.8	Plymouth	17	13.8	11.2
	Fayette	17	16.1	10.8	Sioux	12	7.5	5.9
	Henry	15	14.9	12.4	Wapello	22	12.3	9
	Jackson	12	11.9	9.2	Webster	23	11.8	8.8
	Jasper	20	10.8	8.5	Winneshiek	9	8.6	5.8
					Total	351	11.2	8.6
MSA Counties	Benton	10	7.6	6.1	Linn	72	7.2	6.9
	Black Hawk	61	9.6	8.4	Madison	*	*	*
	Bremer	9	7.7	5.3	Mills	7	9.5	10.3
	Dallas	13	5.3	6.8	Polk	116	5.8	6.3
	Dubuque	43	9.5	7.8	Pottawattamie	39	8.8	8
	Grundy	5	8.2	5.5	Scott	79	9.9	10
	Guthrie	*	*	*	Story	36	8.7	9.9
	Harrison	10	12.9	9.1	Warren	22	10.4	10.1
	Johnson	27	4.5	6.9	Washington	12	11.4	8.4
	Jones	16	15.8	12.8	Woodbury	43	8.4	7.9
					Total	626	7.7	7.6
State Total		1,385	9.4	7.8				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Non-Hodgkin's Lymphoma Mortality by County Group 1978-2006



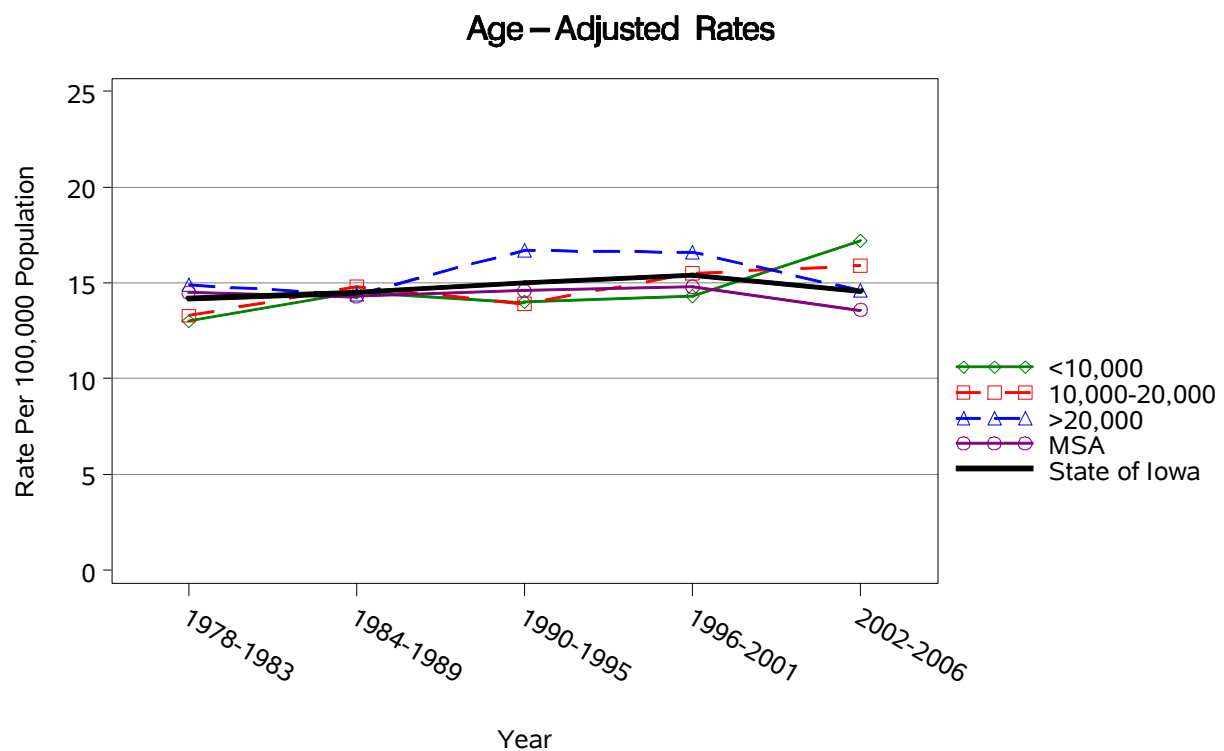
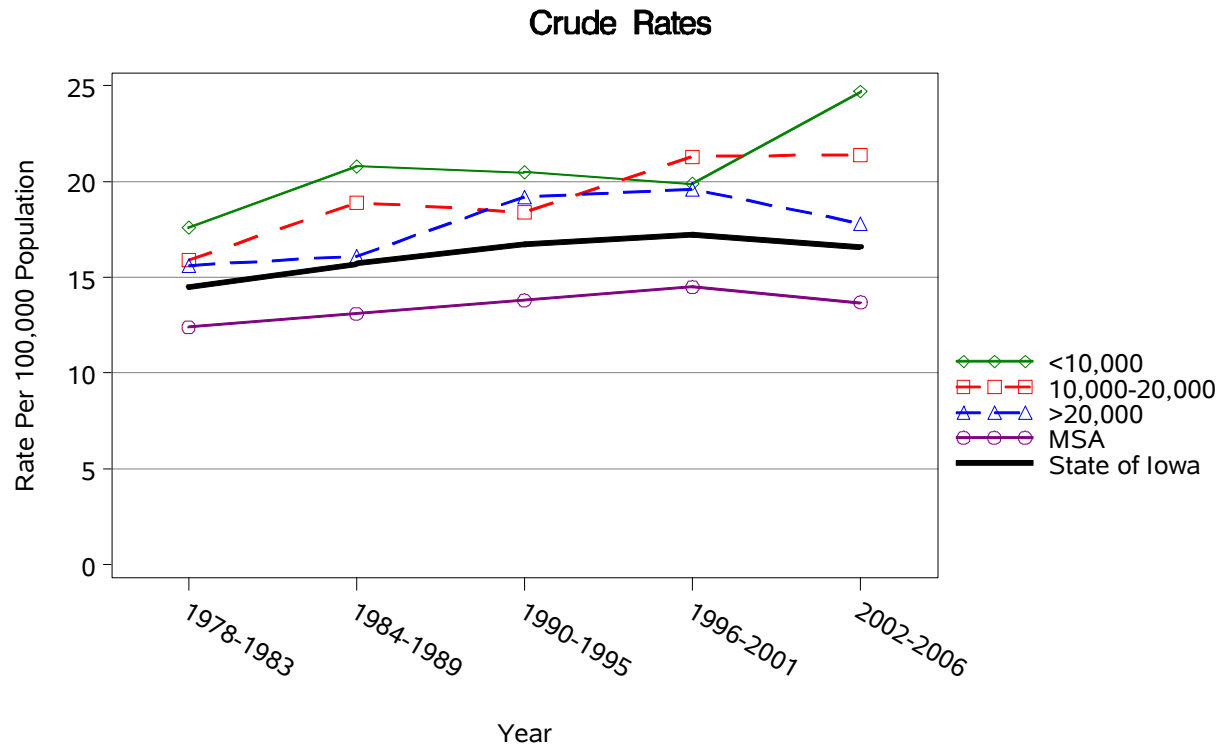
Leukemia Incidence 2002-2006

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	12	30.6	21.5	Lucas	11	23.1	16.8
	Adams	5	23.5	17.2	Monona	16	33.7	19.6
	Audubon	6	18.9	12.2	Monroe	8	20.6	17.6
	Clarke	10	21.8	17.6	Osceola	8	23.8	18
	Davis	12	28.1	22	Palo Alto	10	20.7	13.9
	Decatur	15	35.4	29.6	Pocahontas	11	27.5	15.7
	Fremont	*	*	*	Ringgold	10	38.2	25.8
	Greene	9	18.2	14.1	Taylor	9	27	16
	Howard	7	14.5	10.9	Van Buren	8	20.8	15.4
	Humboldt	11	22.1	13.9	Wayne	7	21.5	12.2
	Ida	20	54.8	33.8	Worth	6	15.5	10.8
					Total	211-5	24.2-24.7	17.2
Counties with Average Population 10,000 – 20,000	Allamakee	14	19.4	14.5	Hardin	22	24.4	15.8
	Appanoose	12	18	11.2	Iowa	14	17.6	11.9
	Buena Vista	21	21.1	18.8	Jefferson	15	19.1	18.1
	Butler	20	27.1	19.1	Keokuk	*	*	*
	Calhoun	13	25	15.1	Kossuth	22	27.3	20.3
	Cass	16	22.7	13.8	Louisa	11	18.3	17.1
	Cedar	14	15.5	11.1	Lyon	11	19.1	14.4
	Cherokee	22	36.1	26.5	Mitchell	14	25.8	17.2
	Chickasaw	9	14.4	10.8	Montgomery	11	19.6	13.6
	Clay	16	18.9	13.6	O'Brien	24	33.3	23.5
	Clayton	16	17.8	12.8	Page	23	28.5	21
	Crawford	16	19.2	15.9	Poweshiek	18	19.2	12.9
	Delaware	13	14.6	12.8	Sac	14	26	21.3
	Dickinson	14	17	10.9	Shelby	12	19	14.4
	Emmet	12	22.7	16.2	Tama	26	29	21.3
	Floyd	16	19.5	15	Union	18	30	23.4
	Franklin	8	15.1	10	Winnebago	12	21.4	19.5
	Hamilton	20	24.9	19.9	Wright	16	23.7	16.1
	Hancock	10	17.1	12.9	Total	565-9	21.3-21.4	15.9
Counties with Average Population > 20,000	Boone	22	16.8	13.7	Lee	30	16.5	13.4
	Buchanan	18	17.3	15.5	Mahaska	17	15.3	14.1
	Carroll	15	14.3	10.4	Marion	34	21	18.5
	Cerro Gordo	50	22.4	16.7	Marshall	41	21	17
	Clinton	31	12.5	11	Muscatine	37	17.6	17
	Des Moines	35	17.1	13.6	Plymouth	25	20.3	15.8
	Fayette	21	19.9	16.6	Sioux	33	20.7	16.8
	Henry	14	13.9	12.6	Wapello	36	20.1	15.8
	Jackson	17	16.9	13.1	Webster	37	18.9	14.7
	Jasper	33	17.7	14.3	Winneshiek	12	11.5	9.3
					Total	558	17.8	14.6
MSA Counties	Benton	16	12.1	10.5	Linn	136	13.7	13.4
	Black Hawk	98	15.5	14.3	Madison	11	14.9	14.2
	Bremer	21	18	13.7	Mills	9	12.2	11.4
	Dallas	32	13	15.1	Polk	228	11.5	12.1
	Dubuque	65	14.4	13.1	Pottawattamie	68	15.3	14.2
	Grundy	15	24.5	14.8	Scott	119	14.9	14.8
	Guthrie	15	26.7	18.1	Story	57	13.9	17
	Harrison	13	16.7	15.6	Warren	28	13.2	13.2
	Johnson	59	9.9	13.4	Washington	23	21.8	17.5
	Jones	16	15.8	12.9	Woodbury	76	14.8	14.3
					Total	1,105	13.7	13.6
State Total		2,438-47	16.5-16.6	14.6				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Leukemia Incidence by County Group 1978-2006

Leukemia Mortality 2002-2006

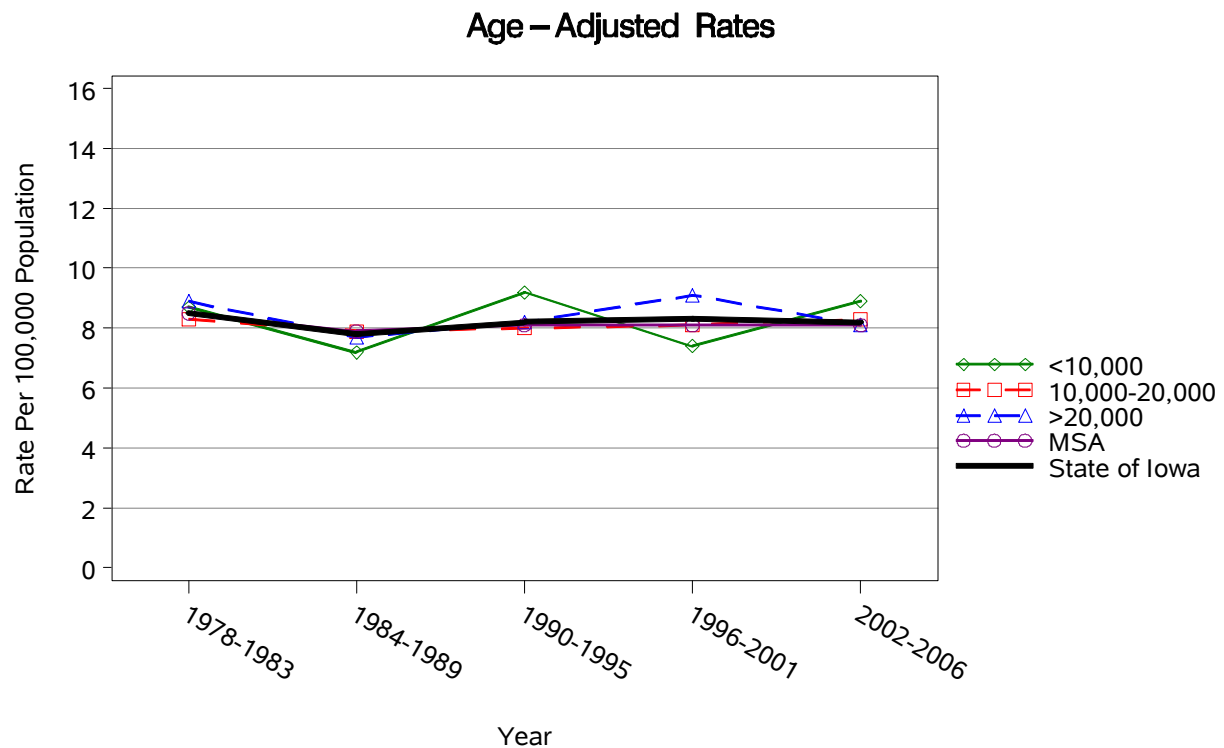
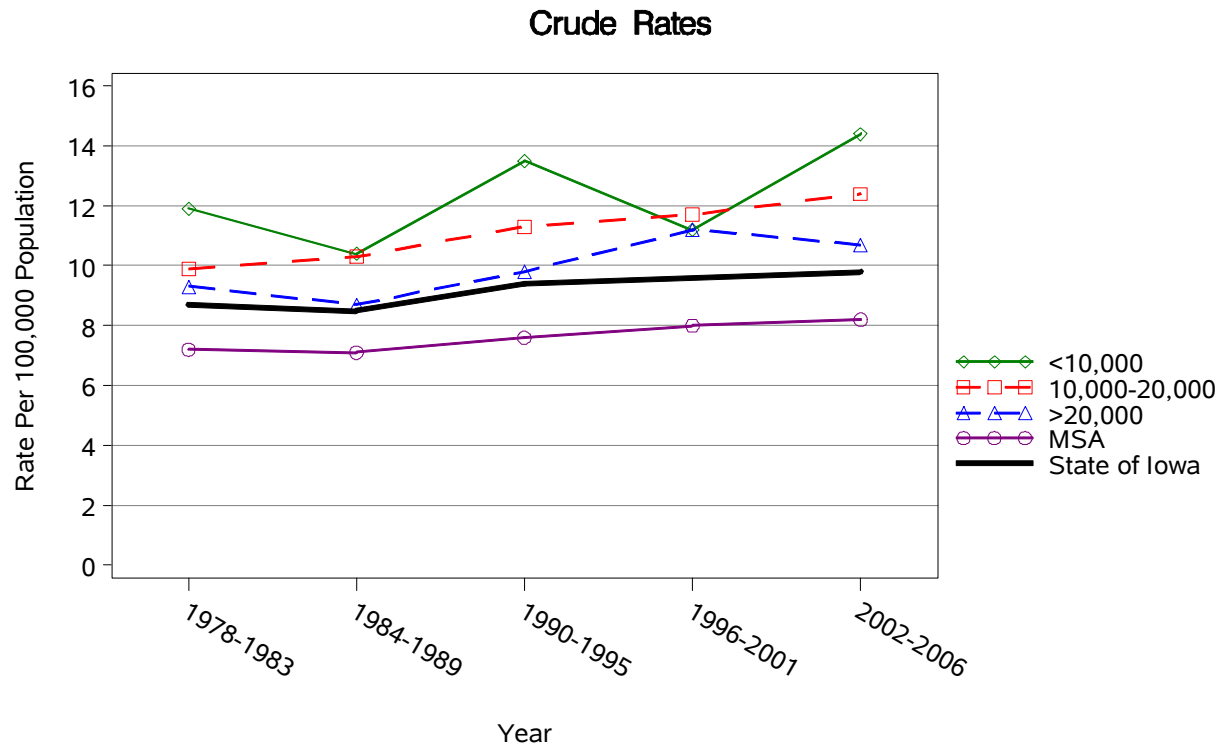
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	5	12.8	7.5	Lucas	5	10.5	7.6
	Adams	*	*	*	Monona	12	25.3	14
	Audubon	5	15.7	7.2	Monroe	5	12.9	7.8
	Clarke	7	15.3	12.2	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	8	16.6	10.3
	Decatur	7	16.5	13.9	Pocahontas	8	20	10.2
	Fremont	*	*	*	Ringgold	5	19.1	10.3
	Greene	*	*	*	Taylor	5	15	9.5
	Howard	*	*	*	Van Buren	6	15.6	10.7
	Humboldt	6	12.1	6.8	Wayne	7	21.5	11.4
	Ida	13	35.6	19.5	Worth	*	*	*
					Total	125	14.4	8.9
	Counties with Average Population 10,000 – 20,000	Allamakee	10	13.8	9.7	Hardin	11	12.2
Appanoose		7	10.5	6.2	Iowa	10	12.6	8.3
Buena Vista		9	9	6.8	Jefferson	5	6.4	4.6
Butler		11	14.9	10.5	Keokuk	5	9	5.6
Calhoun		7	13.4	6.1	Kossuth	10	12.4	9.5
Cass		9	12.8	8.3	Louisa	9	15	12.4
Cedar		20	22.2	15.3	Lyon	7	12.2	7.8
Cherokee		7	11.5	8.3	Mitchell	9	16.6	11
Chickasaw		5	8	5.5	Montgomery	*	*	*
Clay		8	9.5	6	O'Brien	18	25	15.3
Clayton		12	13.3	9.2	Page	10	12.4	9.1
Crawford		10	12	7.9	Poweshiek	20	21.3	14.4
Delaware		8	9	7.3	Sac	5	9.3	5.2
Dickinson		7	8.5	5.3	Shelby	8	12.7	8.8
Emmet		6	11.3	7.3	Tama	10	11.2	7.1
Floyd		10	12.2	7.7	Union	7	11.7	7.2
Franklin		*	*	*	Winnebago	*	*	*
Hamilton		11	13.7	11.6	Wright	12	17.7	10.8
Hancock		9	15.4	12.5	Total	330	12.4	8.3
Counties with Average Population > 20,000	Boone	12	9.1	6.6	Lee	32	17.6	13.4
	Buchanan	5	4.8	3.3	Mahaska	6	5.4	4.3
	Carroll	13	12.4	7.3	Marion	15	9.3	7.6
	Cerro Gordo	26	11.6	7.9	Marshall	22	11.2	8.9
	Clinton	21	8.5	7	Muscatine	26	12.4	11.4
	Des Moines	22	10.7	7.4	Plymouth	19	15.4	11.8
	Fayette	11	10.4	7.3	Sioux	18	11.3	8.5
	Henry	11	10.9	9.4	Wapello	19	10.6	7.5
	Jackson	9	9	6.6	Webster	21	10.7	8.2
	Jasper	23	12.4	9.8	Winneshiek	*	*	*
					Total	331-335	10.6-11.5	8.9
	MSA Counties	Benton	8	6.1	5.1	Linn	81	8.1
Black Hawk		61	9.6	8.8	Madison	5	6.8	7.2
Bremer		8	6.8	4.7	Mills	*	*	*
Dallas		19	7.7	8.9	Polk	148	7.5	8
Dubuque		54	11.9	10.4	Pottawattamie	35	7.9	7.2
Grundy		*	*	*	Scott	72	9	9
Guthrie		5	8.9	4.6	Story	35	8.5	10.1
Harrison		6	7.7	6.4	Warren	17	8	8.5
Johnson		32	5.3	7.3	Washington	11	10.4	6.3
Jones		13	12.8	9.9	Woodbury	44	8.6	7.8
					Total	660	8.2	8.1
		State Total	1,446-50	9.8-9.9	8.2			

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Leukemia Mortality by County Group 1978-2006



Skin Melanoma Incidence 2002-2006

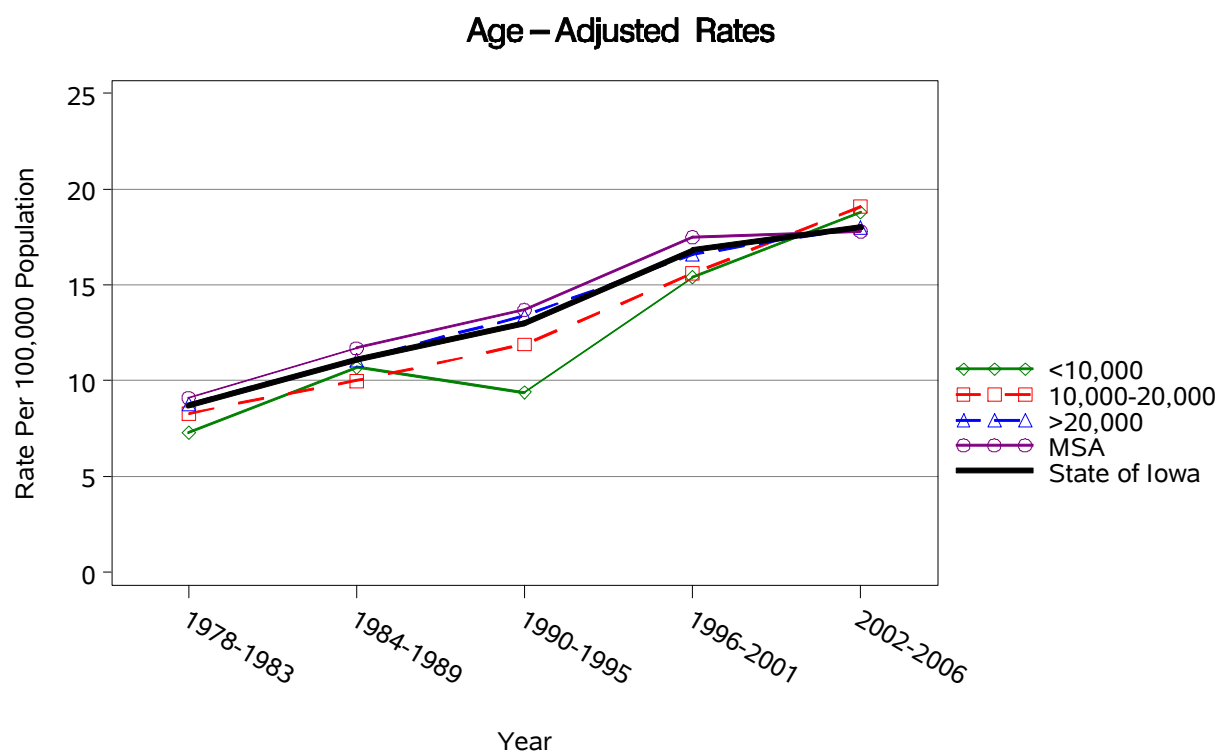
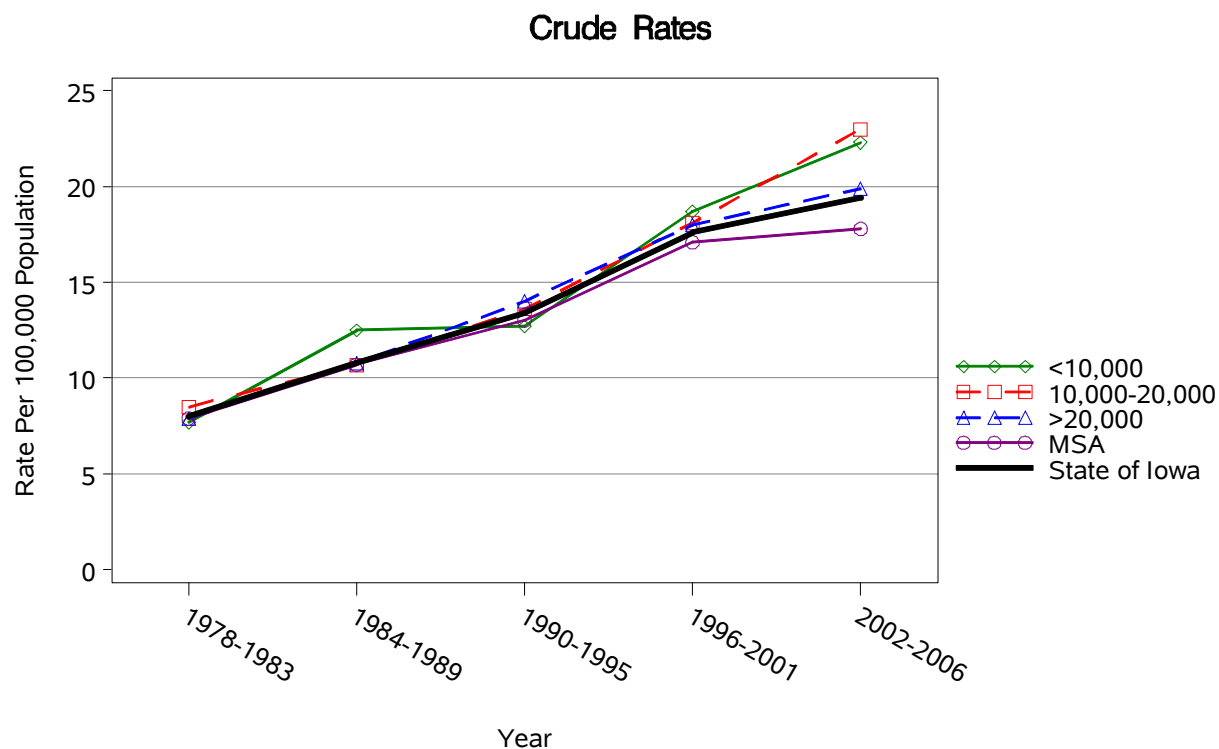
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	8	20.4	18.5	Lucas	15	31.5	24.1
	Adams	5	23.5	24.6	Monona	9	19	16.4
	Audubon	5	15.7	14	Monroe	10	25.8	21.1
	Clarke	7	15.3	14.8	Osceola	7	20.8	17.4
	Davis	9	21.1	19	Palo Alto	11	22.8	23.1
	Decatur	9	21.2	19.5	Pocahontas	5	12.5	6.4
	Fremont	11	28.7	22.5	Ringgold	*	*	*
	Greene	20	40.4	32	Taylor	10	30	24.1
	Howard	14	28.9	26.1	Van Buren	5	13	10.1
	Humboldt	9	18.1	13.9	Wayne	6	18.4	17.5
	Ida	10	27.4	25	Worth	6	15.5	13.6
					Total	191-95	21.9-22.4	18
Counties with Average Population 10,000 – 20,000	Allamakee	7	9.7	8.4	Hardin	25	27.7	23.3
	Appanoose	14	21	14.7	Iowa	19	23.9	23.5
	Buena Vista	20	20.1	18	Jefferson	14	17.9	15.6
	Butler	19	25.7	20.6	Keokuk	10	18.1	15.6
	Calhoun	10	19.2	12.4	Kossuth	26	32.2	28.1
	Cass	12	17	14.1	Louisa	18	30	28
	Cedar	22	24.4	22.2	Lyon	13	22.6	17.2
	Cherokee	14	22.9	14.6	Mitchell	13	24	19.3
	Chickasaw	16	25.6	21	Montgomery	12	21.4	17.9
	Clay	14	16.6	13.5	O'Brien	13	18	15.3
	Clayton	22	24.4	19.3	Page	28	34.7	25.4
	Crawford	10	12	11	Poweshiek	19	20.3	16.1
	Delaware	15	16.8	15.9	Sac	15	27.9	24.8
	Dickinson	26	31.5	22.9	Shelby	17	27	21.4
	Emmet	*	*	*	Tama	19	21.2	19
	Floyd	31	37.7	32.5	Union	13	21.7	19.6
	Franklin	8	15.1	13.3	Winnebago	16	28.5	23.7
	Hamilton	16	20	16.9	Wright	15	22.2	15.9
	Hancock	26	44.5	36.1	Total	607-11	22.9-23	18.9
Counties with Average Population > 20,000	Boone	26	19.8	16.8	Lee	37	20.3	17.3
	Buchanan	16	15.4	16.3	Mahaska	16	14.4	13.3
	Carroll	24	22.9	21.6	Marion	31	19.1	18.5
	Cerro Gordo	62	27.7	23.4	Marshall	32	16.4	14.1
	Clinton	46	18.6	16.9	Muscatine	42	20	19.4
	Des Moines	34	16.6	13.8	Plymouth	30	24.4	23.7
	Fayette	20	19	16.5	Sioux	36	22.6	21.8
	Henry	16	15.9	15	Wapello	36	20.1	18.3
	Jackson	23	22.9	21.2	Webster	28	14.3	12
	Jasper	43	23.1	20.7	Winneshek	24	22.9	21.2
					Total	622	19.9	18
MSA Counties	Benton	28	21.2	20.1	Linn	185	18.6	18.3
	Black Hawk	136	21.5	20.8	Madison	15	20.4	18.2
	Bremer	23	19.7	19.2	Mills	10	13.5	13.9
	Dallas	44	17.8	19	Polk	284	14.3	14.7
	Dubuque	85	18.8	17.9	Pottawattamie	64	14.4	13.5
	Grundy	23	37.5	29.5	Scott	151	18.9	18.5
	Guthrie	17	30.2	22.4	Story	67	16.3	19.6
	Harrison	14	18	15	Warren	39	18.4	17.7
	Johnson	106	17.7	21	Washington	16	15.2	12.9
	Jones	15	14.8	13.2	Woodbury	116	22.7	22.4
					Total	1,438	17.8	17.8
State Total		2858-66	19.3-19.4	18.3				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Skin Melanoma Incidence by County Group 1978-2006



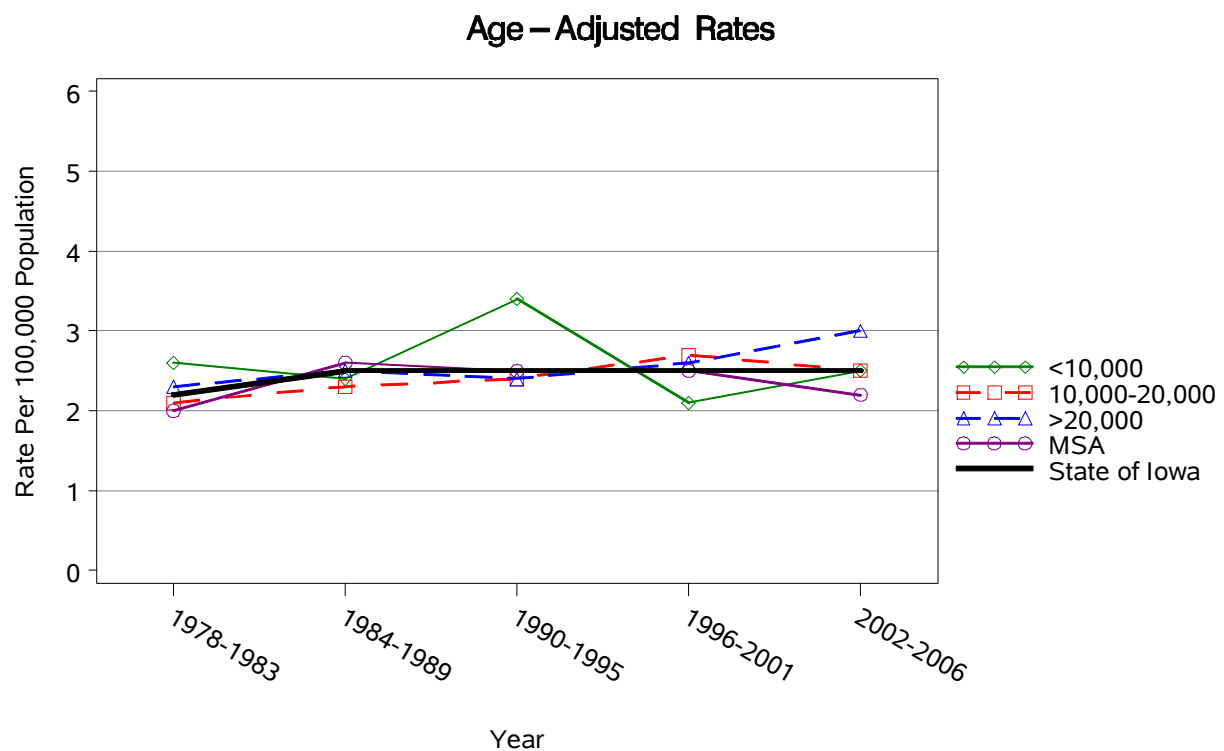
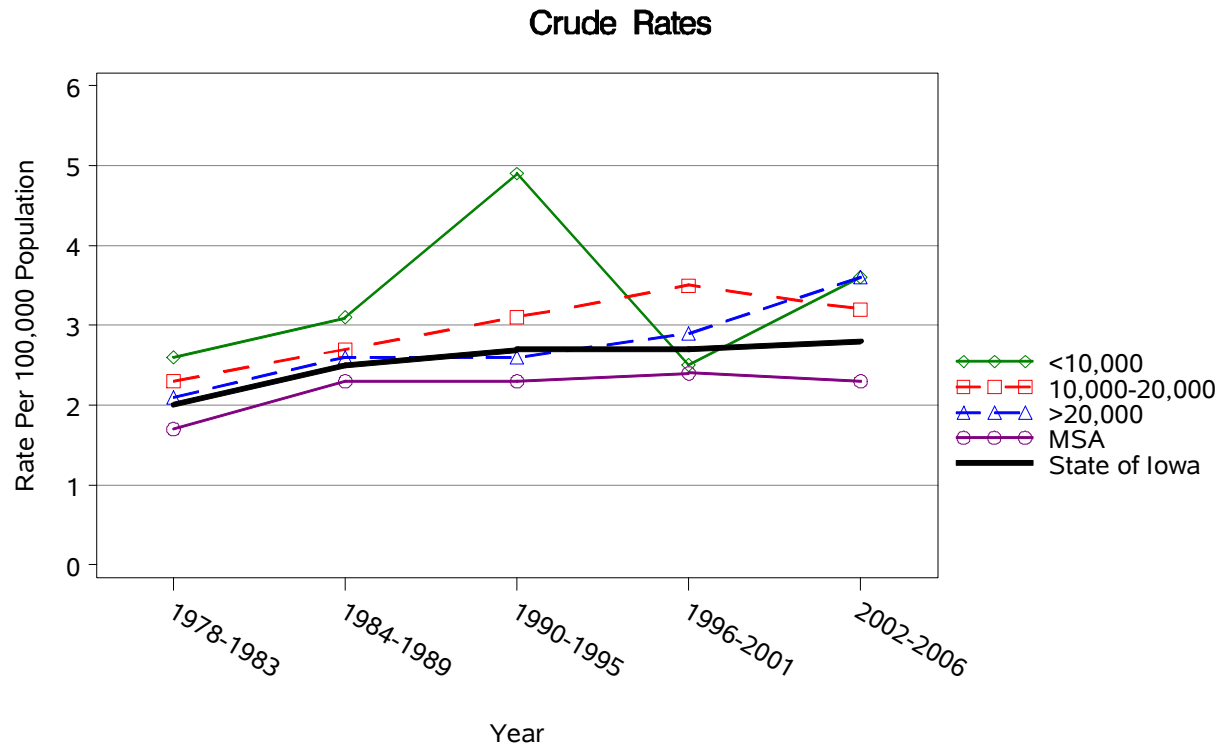
Skin Melanoma Mortality 2002-2006

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	31	3.6	2.5
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Iowa	6	7.6	6.7
	Buena Vista	*	*	*	Jefferson	*	*	*
	Butler	*	*	*	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	6	10.4	9.1
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	*	*	*	Montgomery	*	*	*
	Clay	*	*	*	O'Brien	*	*	*
	Clayton	*	*	*	Page	*	*	*
	Crawford	*	*	*	Poweshiek	5	5.3	3.8
	Delaware	*	*	*	Sac	*	*	*
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	*	*	*	Tama	*	*	*
	Floyd	*	*	*	Union	*	*	*
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	*	*	*	Wright	*	*	*
	Hancock	*	*	*	Total	86	3.2	2.5
Counties with Average Population > 20,000	Boone	*	*	*	Lee	12	6.6	5.0
	Buchanan	*	*	*	Mahaska	*	*	*
	Carroll	*	*	*	Marion	7	4.3	3.5
	Cerro Gordo	*	*	*	Marshall	6	3.1	2.5
	Clinton	3.6	3.2	3.6	Muscatine	10	4.8	4.6
	Des Moines	2.9	1.9	2.9	Plymouth	5	4.1	3.3
	Fayette	4.7	3.6	4.7	Sioux	7	4.4	4.3
	Henry	5.0	4.5	5.0	Wapello	6	3.4	2.7
	Jackson	*	*	*	Webster	7	3.6	2.9
	Jasper	10	5.4	4.8	Winneshiek	*	*	*
					Total	115	3.6	3
MSA Counties	Benton	*	*	*	Linn	24	2.4	2.3
	Black Hawk	18	2.8	2.6	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	*	*	*	Polk	43	2.3	2.2
	Dubuque	10	2.2	1.8	Pottawattamie	12	2.5	2.7
	Grundy	*	*	*	Scott	21	2.6	2.6
	Guthrie	*	*	*	Story	5	1.5	1.2
	Harrison	5	6.4	6.0	Warren	5	2.5	2.4
	Johnson	11	1.9	2.5	Washington	*	*	*
	Jones	14	2.3	3.2	Woodbury	7	1.4	1.3
					Total	183	2.3	2.2
	State Total	412	2.8	2.5				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Skin Melanoma Mortality by County Group 1978-2006

Oral Cavity (Excluding Lip) Cancer Incidence 2002-2006

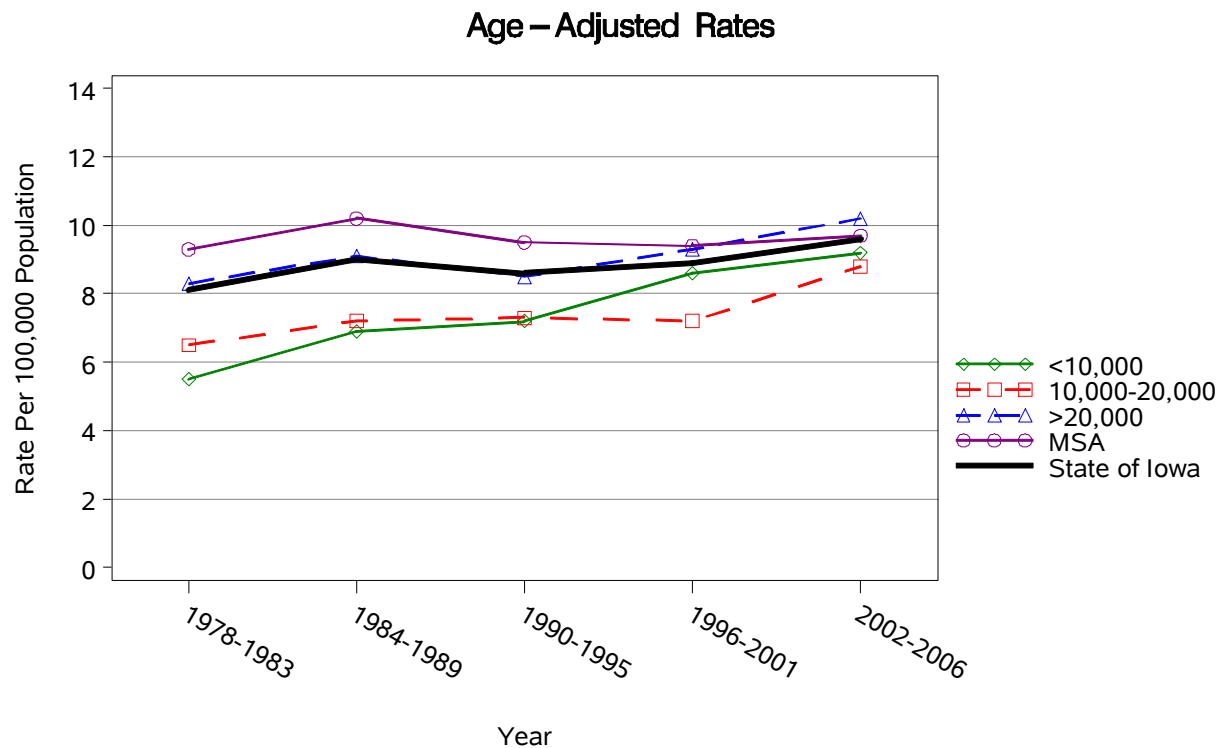
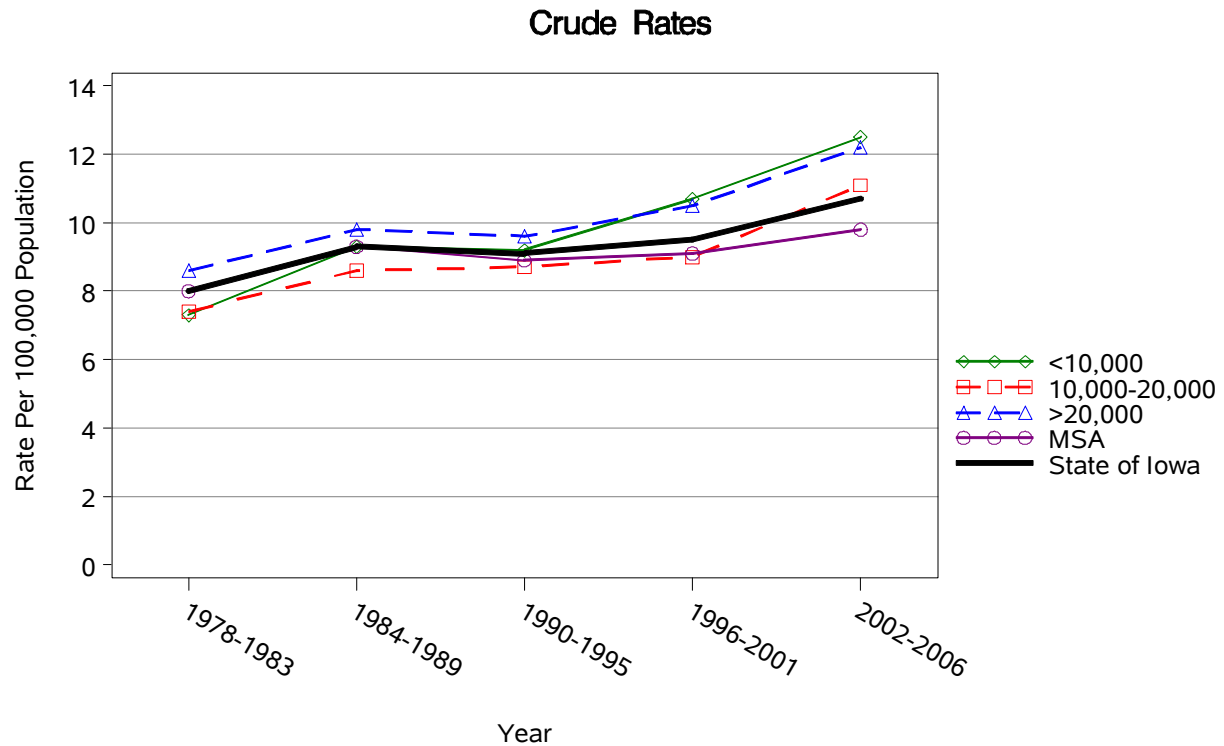
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	6	15.3	11	Lucas	*	*	*
	Adams	5	23.5	14.5	Monona	*	*	*
	Audubon	*	*	*	Monroe	7	18.1	15.8
	Clarke	5	10.9	9.2	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	5	11.8	8.6	Pocahontas	*	*	*
	Fremont	8	20.9	13.4	Ringgold	*	*	*
	Greene	10	20.2	16.1	Taylor	5	15	9.2
	Howard	9	18.6	14.9	Van Buren	6	15.6	10.5
	Humboldt	7	14.1	9	Wayne	7	21.5	17
	Ida	*	*	*	Worth	*	*	*
					Total	109	12.5	9.2
Counties with Average Population 10,000 – 20,000	Allamakee	12	16.6	12.8	Hardin	8	8.9	6.1
	Appanoose	9	13.5	10.4	Iowa	11	13.9	11.7
	Buena Vista	10	10	9.2	Jefferson	9	11.5	9.6
	Butler	*	*	*	Keokuk	5	9	6.4
	Calhoun	6	11.5	8.3	Kossuth	*	*	*
	Cass	8	11.4	9.4	Louisa	8	13.3	12.4
	Cedar	13	14.4	13.1	Lyon	7	12.2	10
	Cherokee	5	8.2	5.7	Mitchell	*	*	*
	Chickasaw	7	11.2	10.2	Montgomery	10	17.9	13.1
	Clay	10	11.8	9.7	O'Brien	5	6.9	3.9
	Clayton	12	13.3	11	Page	11	13.6	11.1
	Crawford	9	10.8	9.3	Poweshiek	5	5.3	4.5
	Delaware	8	9	7.3	Sac	8	14.9	10.9
	Dickinson	8	9.7	6.5	Shelby	5	7.9	5.4
	Emmet	7	13.2	10.7	Tama	14	15.6	12.4
	Floyd	6	7.3	6.8	Union	8	13.3	10.4
	Franklin	7	13.2	11.5	Winnebago	5	8.9	6.4
	Hamilton	7	8.7	8.3	Wright	13	19.2	14.3
	Hancock	8	13.7	9.9	Total	295	11.1	8.8
Counties with Average Population > 20,000	Boone	18	13.7	11.4	Lee	25	13.7	10.4
	Buchanan	12	11.5	10	Mahaska	12	10.8	9.8
	Carroll	10	9.5	6.2	Marion	16	9.9	8.8
	Cerro Gordo	24	10.7	8.4	Marshall	30	15.3	12.2
	Clinton	36	14.6	12	Muscatine	24	11.4	10.4
	Des Moines	25	12.2	10	Plymouth	16	13	10.7
	Fayette	10	9.5	6.3	Sioux	14	8.8	8.5
	Henry	8	8	7.3	Wapello	31	17.3	14.6
	Jackson	13	12.9	9.3	Webster	25	12.8	10.6
	Jasper	22	11.8	10.3	Winnesiek	11	10.5	9.4
					Total	382	12.2	10.2
MSA Counties	Benton	14	10.6	9.4	Linn	112	11.3	10.8
	Black Hawk	69	10.9	10.1	Madison	7	9.5	8.7
	Bremer	13	11.1	9.1	Mills	6	8.1	7.4
	Dallas	17	6.9	8	Polk	190	9.6	10.2
	Dubuque	44	9.7	8.6	Pottawattamie	33	7.4	6.8
	Grundy	7	11.4	9.9	Scott	87	10.9	10.4
	Guthrie	9	16	13.3	Story	29	7	8.5
	Harrison	8	10.3	8.8	Warren	21	9.9	9.2
	Johnson	49	8.2	11.3	Washington	14	13.3	11
	Jones	11	10.8	9.3	Woodbury	49	9.6	9.5
					Total	789	9.8	9.7
State Total		1,575	10.7	9.6				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Oral Cavity (Excluding Lip) Cancer Incidence by County Group 1978-2006



Oral Cavity (Excluding Lip) Cancer Mortality 2002-2006

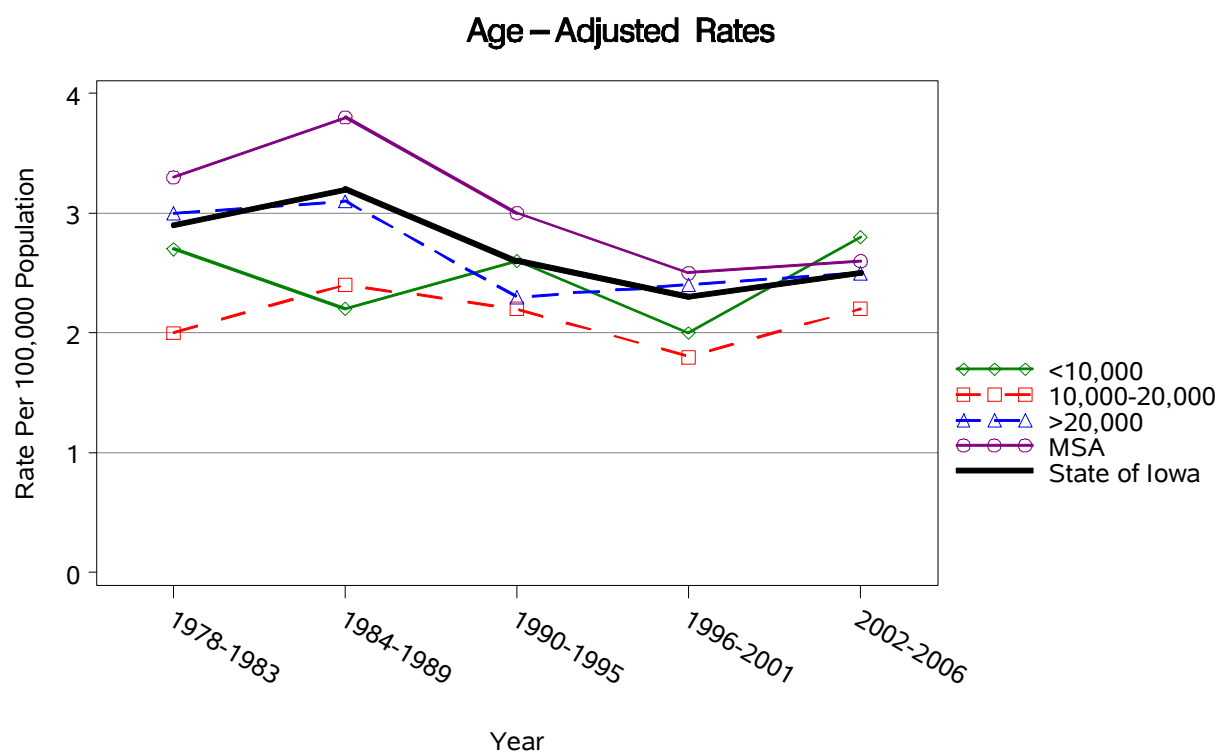
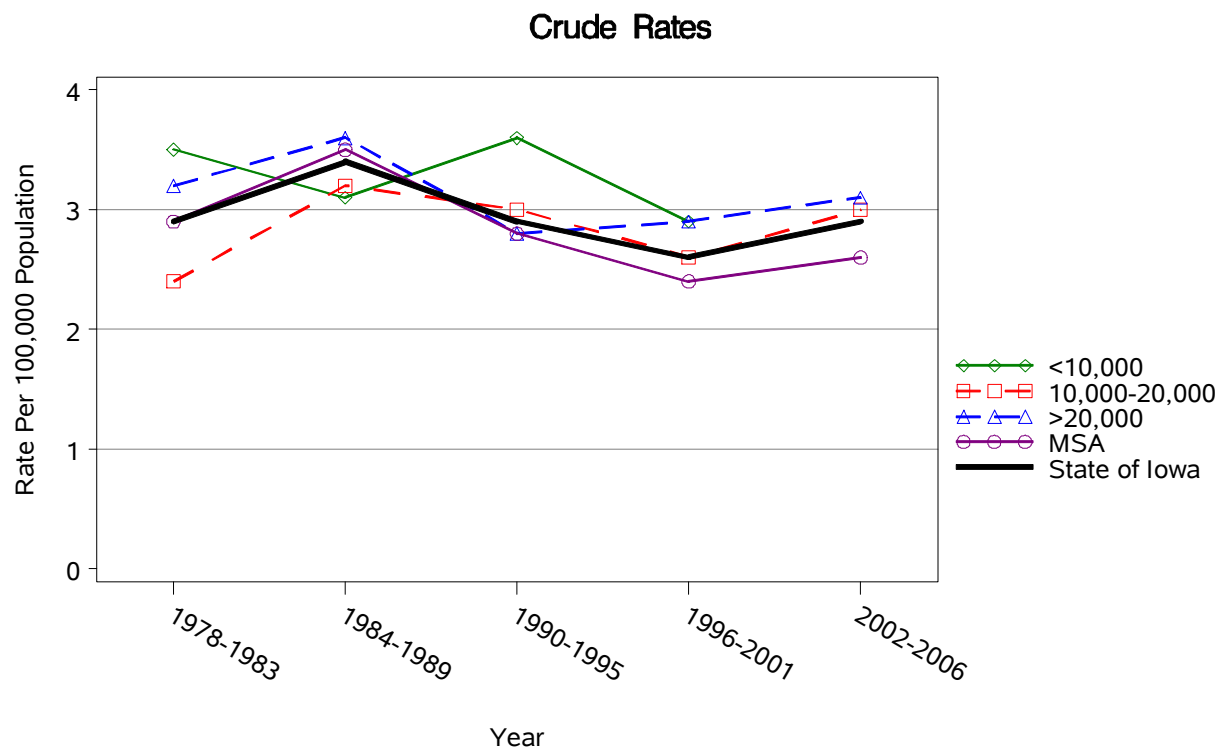
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	5	10.5	7.6
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	36	4.1	2.6
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	6	8.8	8	Iowa	*	*	*
	Buena Vista	*	*	*	Jefferson	*	*	*
	Butler	*	*	*	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	*	*	*
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	*	*	*	Montgomery	*	*	*
	Clay	*	*	*	O'Brien	*	*	*
	Clayton	7	7.6	5.9	Page	*	*	*
	Crawford	5	5.9	5.2	Poweshiek	*	*	*
	Delaware	*	*	*	Sac	5	9.1	6
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	*	*	*	Tama	*	*	*
	Floyd	*	*	*	Union	*	*	*
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	*	*	*	Wright	*	*	*
	Hancock	*	*	*	Total	74	2.8	2
Counties with Average Population > 20,000	Boone	5	3.8	3.5	Lee	*	*	*
	Buchanan	*	*	*	Mahaska	*	*	*
	Carroll	*	*	*	Marion	*	*	*
	Cerro Gordo	8	3.5	2.8	Marshall	6	3	2.3
	Clinton	13	5.2	3.9	Muscatine	*	*	*
	Des Moines	6	2.9	2.3	Plymouth	*	*	*
	Fayette	*	*	*	Sioux	*	*	*
	Henry	*	*	*	Wapello	8	4.5	3.6
	Jackson	*	*	*	Webster	9	4.6	3.9
	Jasper	5	2.7	2.2	Winneshiek	*	*	*
					Total	90	2.9	2.3
MSA Counties	Benton	*	*	*	Linn	20	2	2
	Black Hawk	15	2.4	2	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	5	2.1	2.7	Polk	54	2.8	3
	Dubuque	15	3.3	2.8	Pottawattamie	10	2.3	2.1
	Grundy	6	9.7	7.8	Scott	27	3.4	3.3
	Guthrie	*	*	*	Story	6	1.5	1.8
	Harrison	6	7.6	6.4	Warren	*	*	*
	Johnson	12	2.1	2.8	Washington	*	*	*
	Jones	*	*	*	Woodbury	19	3.7	3.7
					Total	208	2.6	2.6
	State Total	408	2.8	2.4				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Oral Cavity (Excluding Lip) Cancer Mortality by County Group 1978-2006



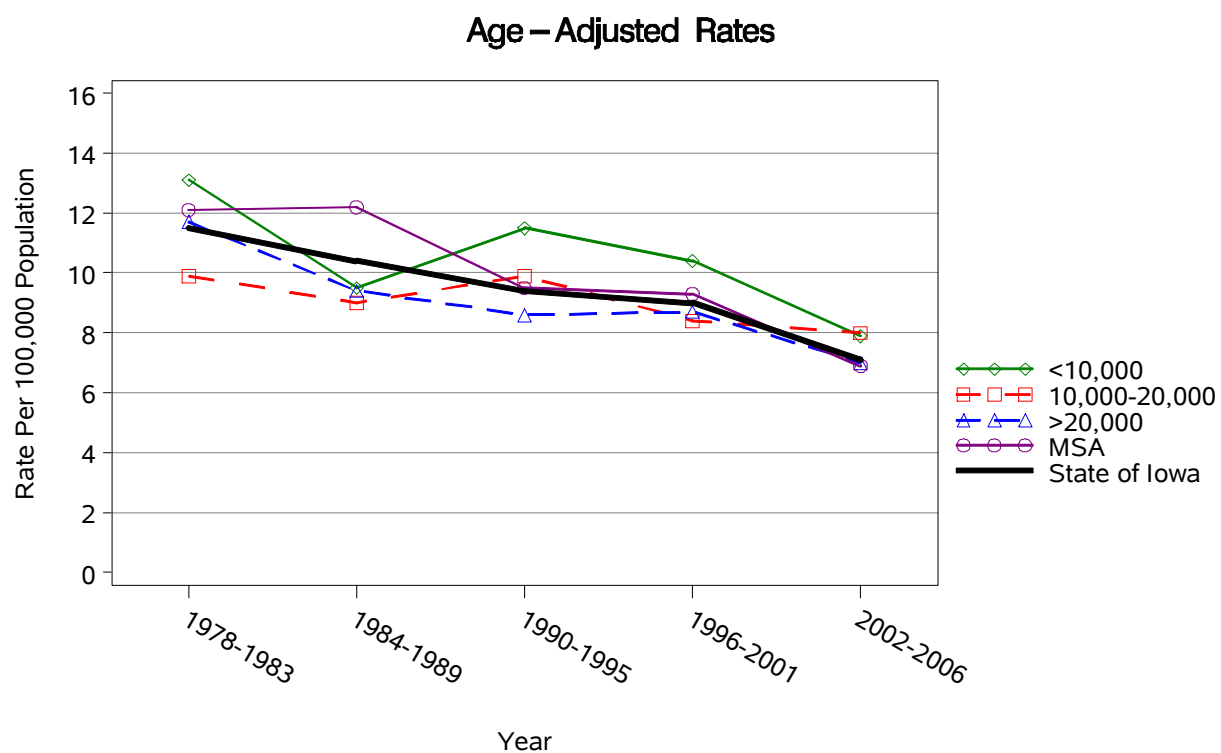
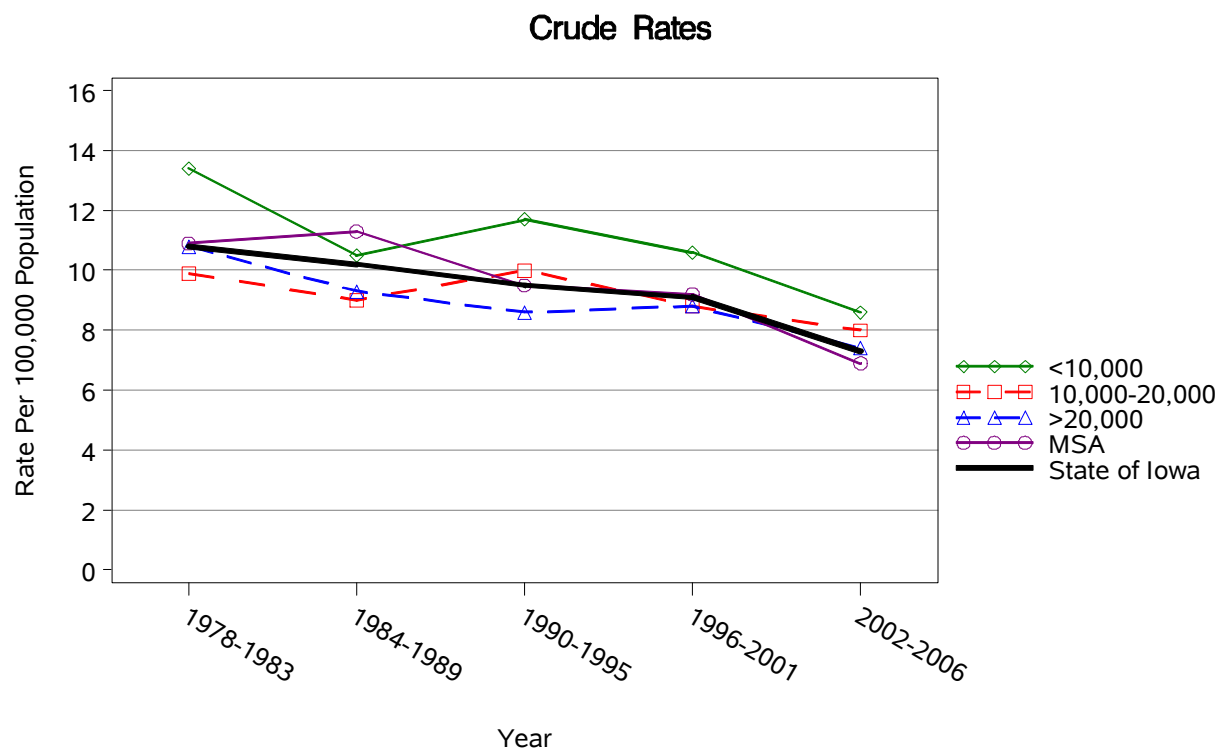
Cervical Cancer Incidence 2002-2006

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	5	21	20.7
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	5	16.4	12.1	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	42	7.9	7.3
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	5	9	7.4
	Appanoose	*	*	*	Iowa	*	*	*
	Buena Vista	*	*	*	Jefferson	6	12.5	12.4
	Butler	*	*	*	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	*	*	*
	Cherokee	6	16	14.1	Mitchell	*	*	*
	Chickasaw	5	13.3	12.9	Montgomery	*	*	*
	Clay	8	15.3	11.3	O'Brien	*	*	*
	Clayton	*	*	*	Page	6	12.6	11.3
	Crawford	7	14.1	16.1	Poweshiek	*	*	*
	Delaware	*	*	*	Sac	*	*	*
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	7	21.6	19.2	Tama	*	*	*
	Floyd	*	*	*	Union	*	*	*
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	*	*	*	Wright	7	16.9	17.7
	Hancock	*	*	*	Total	130	8	8.1
Counties with Average Population > 20,000	Boone	5	6.2	6.2	Lee	7	6.3	6.9
	Buchanan	*	*	*	Mahaska	7	10.5	10.3
	Carroll	6	9.3	7.7	Marion	*	*	*
	Cerro Gordo	16	11.5	11.1	Marshall	11	9.3	7.6
	Clinton	12	7.9	7.8	Muscatine	16	12.6	12.7
	Des Moines	9	7.1	6.6	Plymouth	*	*	*
	Fayette	6	9.3	7.9	Sioux	*	*	*
	Henry	*	*	*	Wapello	10	9.1	7
	Jackson	5	8.2	7.7	Webster	12	10.3	9.9
	Jasper	5	4.5	5	Winneshiek	*	*	*
					Total	146	7.7	7.3
MSA Counties	Benton	7	8.9	8.8	Linn	43	7.1	7
	Black Hawk	24	6.1	6.3	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	11	7.5	7.2	Polk	98	8.1	7.9
	Dubuque	15	5.4	5.5	Pottawattamie	22	8.1	8.2
	Grundy	*	*	*	Scott	41	8.4	8.2
	Guthrie	6	17.6	21.6	Story	10	4.2	4.7
	Harrison	6	12.6	12.1	Warren	6	4.6	4.9
	Johnson	10	2.8	3.1	Washington	*	*	*
	Jones	*	*	*	Woodbury	28	8.9	9
					Total	346	7	7.1
	State Total	664	7.4	7.3				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Cervical Cancer Incidence by County Group 1978-2006

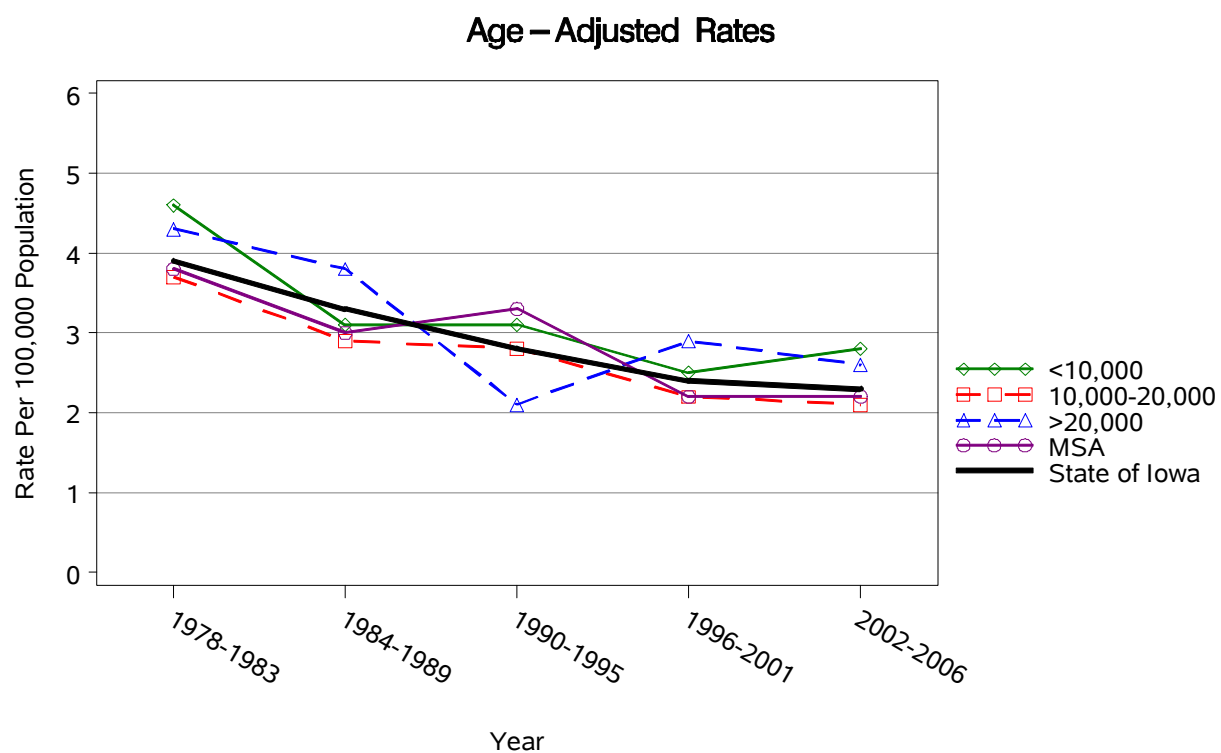
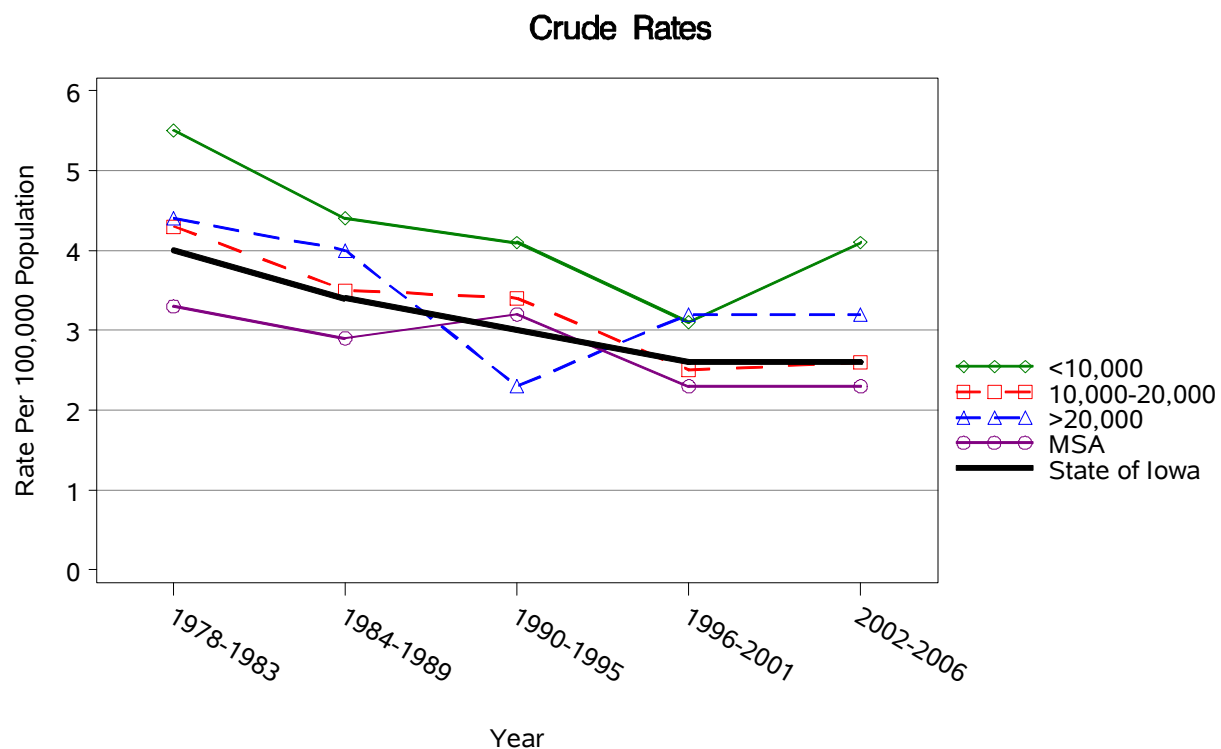
Cervical Cancer Mortality 2002-2006

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	14	3.1	2.1
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Iowa	*	*	*
	Buena Vista	*	*	*	Jefferson	*	*	*
	Butler	*	*	*	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	*	*	*
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	*	*	*	Montgomery	*	*	*
	Clay	*	*	*	O'Brien	*	*	*
	Clayton	*	*	*	Page	*	*	*
	Crawford	*	*	*	Poweshiek	*	*	*
	Delaware	*	*	*	Sac	*	*	*
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	*	*	*	Tama	*	*	*
	Floyd	*	*	*	Union	*	*	*
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	*	*	*	Wright	*	*	*
	Hancock	*	*	*	Total	32	2.3	2
Counties with Average Population > 20,000	Boone	*	*	*	Lee	*	*	*
	Buchanan	*	*	*	Mahaska	*	*	*
	Carroll	*	*	*	Marion	*	*	*
	Cerro Gordo	5	4.3	3.4	Marshall	*	*	*
	Clinton	*	*	*	Muscatine	6	5.6	5.1
	Des Moines	*	*	*	Plymouth	*	*	*
	Fayette	*	*	*	Sioux	*	*	*
	Henry	*	*	*	Wapello	5	5.5	3.2
	Jackson	*	*	*	Webster	*	*	*
	Jasper	*	*	*	Winneshiek	*	*	*
					Total	48	3	2.6
MSA Counties	Benton	*	*	*	Linn	14	2.8	2.8
	Black Hawk	8	2.4	2.6	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	*	*	*	Polk	22	2.2	2.2
	Dubuque	*	*	*	Pottawattamie	*	*	*
	Grundy	*	*	*	Scott	12	2.9	2.7
	Guthrie	*	*	*	Story	*	*	*
	Harrison	*	*	*	Warren	*	*	*
	Johnson	5	1.7	2.3	Washington	*	*	*
	Jones	*	*	*	Woodbury	9	3.4	3.2
					Total	95	2.3	2.2
State Total		189	2.5	2.2				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Cervical Cancer Mortality by County Group 1978-2006

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Injury Mortality

Transportation-related mortality accounted for 2,044 deaths in Iowa from 2002 to 2006, 91% of which were motor vehicle fatalities. The rates for these fatalities are highest in the rural counties and lowest in the most urban counties. Rates for firearm mortality are also highest in the most rural counties. The mortality rates for suicide show that the gaps in rates by county group have narrowed for the most recent time period. The crude rates for mortality from falls tend to be highest in rural counties, because of the greater numbers of elderly. This difference goes away when the rates are age-adjusted. Homicide rates are consistently higher in the urban counties. Poisoning mortality rates have shown variation across years for each county group. The state's mortality rate from burns has decreased since the 1979-1983 period. In general, drowning deaths have consistently decreased across all county levels since the 1979-1983 period. Deaths from all other unintentional injuries are difficult to compare for 1999-2006 versus preceding years due to changes in the mortality classification systems (discussed below).

HIGHLIGHTS...

- ✓ Injuries are the leading cause of death in persons 1-34 years of age.
- ✓ Motor vehicle deaths account for 91% of all transportation deaths in Iowa.
- ✓ Crude mortality rates from motor vehicle accidents, firearms, and falls are highest in rural counties.

Beginning in 1999, the tenth revision of the International Classification of Diseases (ICD-10) replaced the ninth version (ICD-9) as the standard mortality classification system. ICD-10 is more detailed than ICD-9; ICD-10 has about 8,000 categories while ICD-9 has about 5,000 categories. Also, some of the coding rules and rules for selecting the underlying cause of death have changed. Because of the new classification system, observed changes in mortality rates between 1999 and 2006 versus preceding years could be due, in part, to changes in the method of mortality classification. The ICD-9 and ICD-10 codes used for each type of Injury Mortality are listed in Appendix III.

The source of these mortality data are the cause of death data obtained from death certificates filed at the Iowa Department of Public Health. Analysis was done by the State Health Registry of Iowa and the Center for Public Health Statistics at the University of Iowa. Age-adjusted rates were calculated using the Year 2000 U.S. population distribution.

All Transportation Mortality 2002-2006

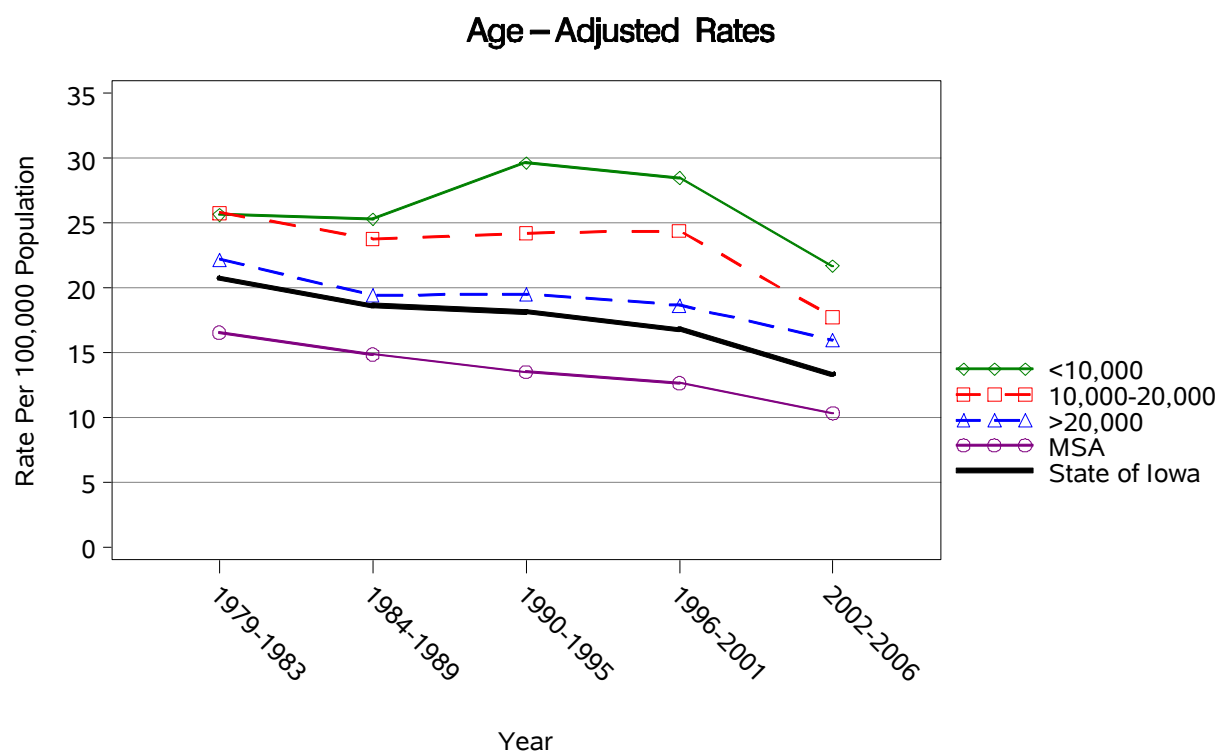
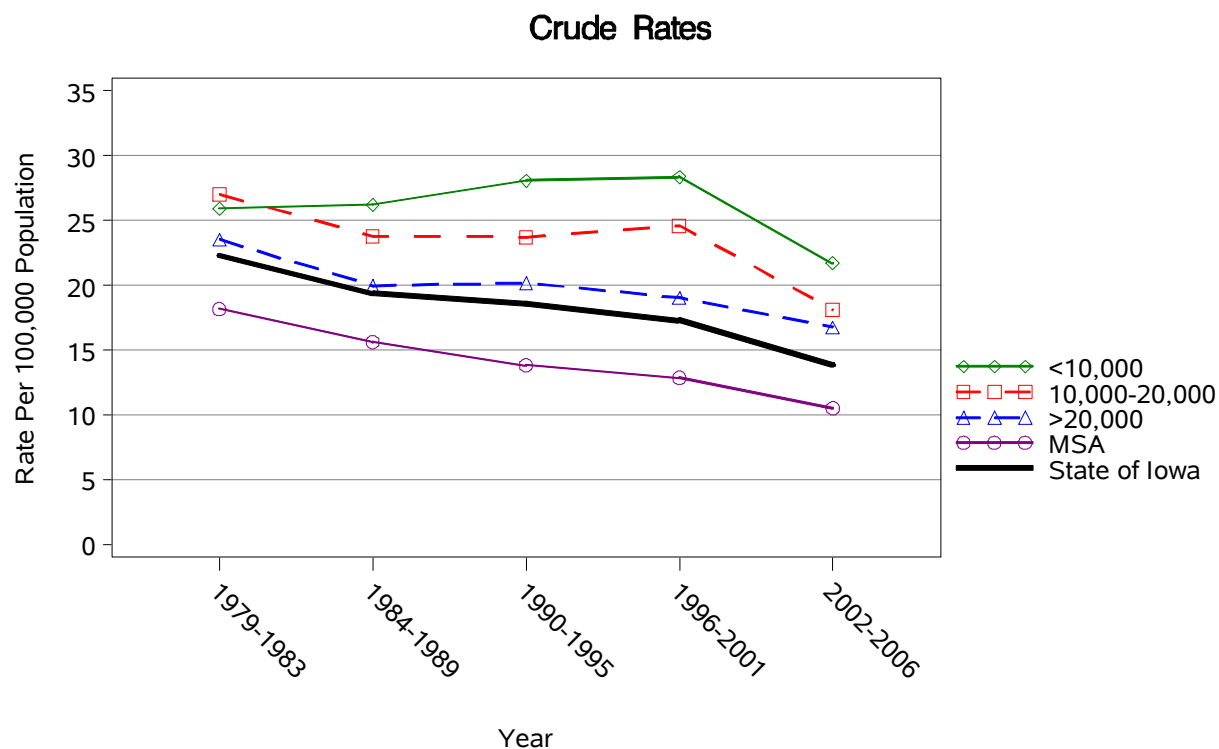
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	12	30.6	29.3	Lucas	10	21.0	20.4
	Adams	6	28.2	23.0	Monona	18	37.9	40.6
	Audubon	*	*	*	Monroe	5	12.9	12.8
	Clarke	10	21.8	23.7	Osceola	*	*	*
	Davis	14	32.8	31.4	Palo Alto	9	18.6	19.5
	Decatur	8	18.9	20.6	Pocahontas	9	22.5	28.6
	Fremont	6	15.7	15.8	Ringgold	*	*	*
	Greene	7	14.1	12.6	Taylor	5	15.0	16.7
	Howard	10	20.7	22.0	Van Buren	14	36.5	36.8
	Humboldt	14	28.2	29.0	Wayne	12	36.8	37.2
	Ida	9	24.7	28.0	Worth	*	*	*
					Total	189	21.7	21.7
Counties with Average Population 10,000 – 20,000	Allamakee	10	13.8	14.6	Hardin	21	23.3	20.4
	Appanoose	13	19.5	21.6	Iowa	18	22.7	23.2
	Buena Vista	12	12.0	10.5	Jefferson	16	20.4	21.1
	Butler	14	19.0	19.9	Keokuk	13	23.5	24.2
	Calhoun	10	19.2	20.8	Kossuth	10	12.4	9.2
	Cass	12	17.0	17.5	Louisa	16	26.6	27.2
	Cedar	15	16.6	16.9	Lyon	8	13.9	11.7
	Cherokee	17	27.9	21.7	Mitchell	11	20.3	20.2
	Chickasaw	26	41.7	37.6	Montgomery	10	17.9	17.1
	Clay	10	11.8	11.8	O'Brien	14	19.4	18.6
	Clayton	19	21.1	22.1	Page	5	6.2	5.8
	Crawford	12	14.4	14.9	Poweshiek	21	22.4	19.6
	Delaware	12	13.5	13.7	Sac	9	16.7	19.5
	Dickinson	11	13.3	13.8	Shelby	6	9.5	9.9
	Emmet	10	18.9	17.6	Tama	19	21.2	20.0
	Floyd	9	10.9	10.3	Union	12	20.0	22.2
	Franklin	6	11.3	8.4	Winnebago	16	28.5	30.7
	Hamilton	16	20.0	18.8	Wright	15	22.2	23.7
	Hancock	6	10.3	10.5	Total	480	18.1	17.7
Counties with Average Population > 20,000	Boone	26	19.8	18.5	Lee	29	15.9	15.1
	Buchanan	18	17.3	17.6	Mahaska	15	13.5	12.9
	Carroll	20	19.1	17.2	Marion	26	16.0	14.8
	Cerro Gordo	33	14.8	14.8	Marshall	22	11.2	10.9
	Clinton	46	18.6	17.9	Muscatine	24	11.4	11.2
	Des Moines	24	11.7	11.2	Plymouth	22	17.9	17.2
	Fayette	34	32.2	30.0	Sioux	28	17.6	15.6
	Henry	25	24.9	23.0	Wapello	36	20.1	20.2
	Jackson	19	18.9	19.3	Webster	33	16.9	15.4
	Jasper	30	16.1	15.7	Winneshiek	14	13.4	10.6
					Total	524	16.7	16.0
MSA Counties	Benton	14	10.6	9.5	Linn	100	10.1	10.0
	Black Hawk	78	12.3	11.6	Madison	5	6.8	7.0
	Bremer	11	9.4	9.1	Mills	11	14.9	14.6
	Dallas	37	15.0	15.2	Polk	198	10.0	10.2
	Dubuque	42	9.3	8.9	Pottawattamie	29	6.5	6.3
	Grundy	13	21.2	19.5	Scott	73	9.1	9.1
	Guthrie	19	33.8	32.2	Story	41	10.0	10.3
	Harrison	20	25.7	26.1	Warren	27	12.7	12.2
	Johnson	41	6.9	7.0	Washington	16	15.2	15.4
	Jones	20	19.7	17.9	Woodbury	56	10.9	10.8
					Total	851	10.5	10.3
State Total		2,044	13.9	13.4				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: Iowa Department of Public Health via the State Health Registry of Iowa

* represents a count less than 5

All Transportation Mortality by County Group 1979-2006



Motor Vehicle Traffic Mortality 2002-2006

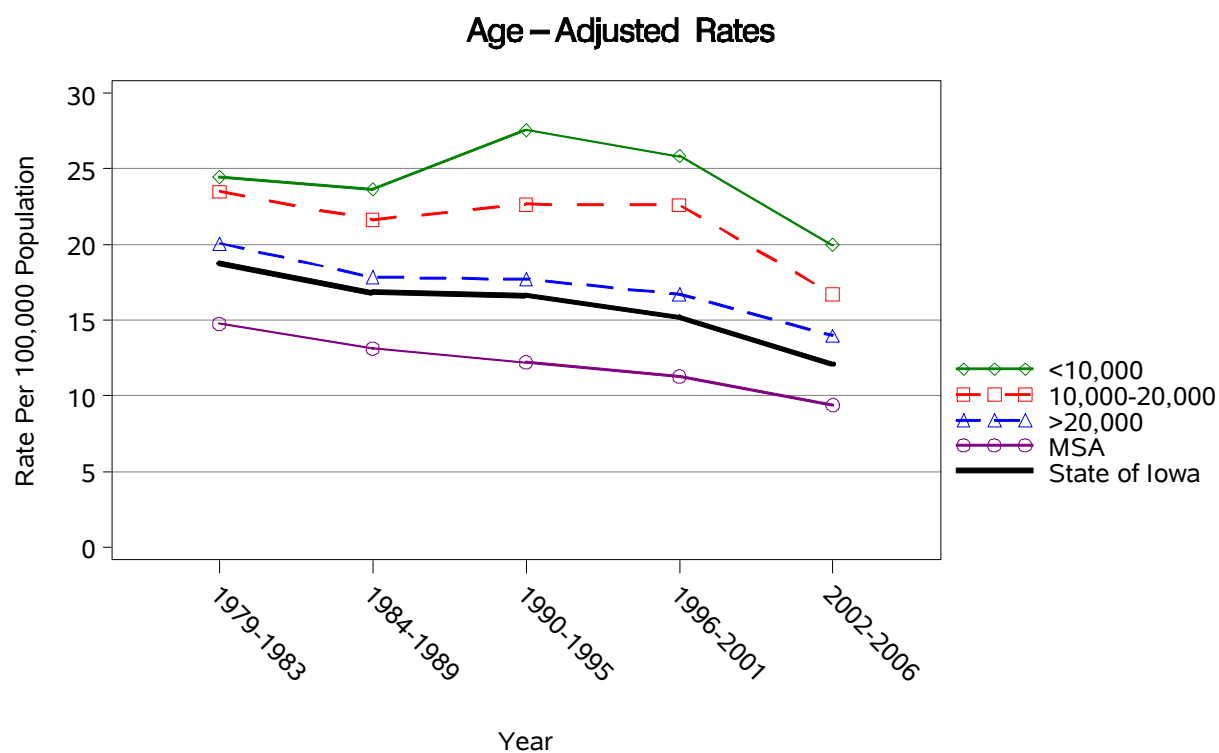
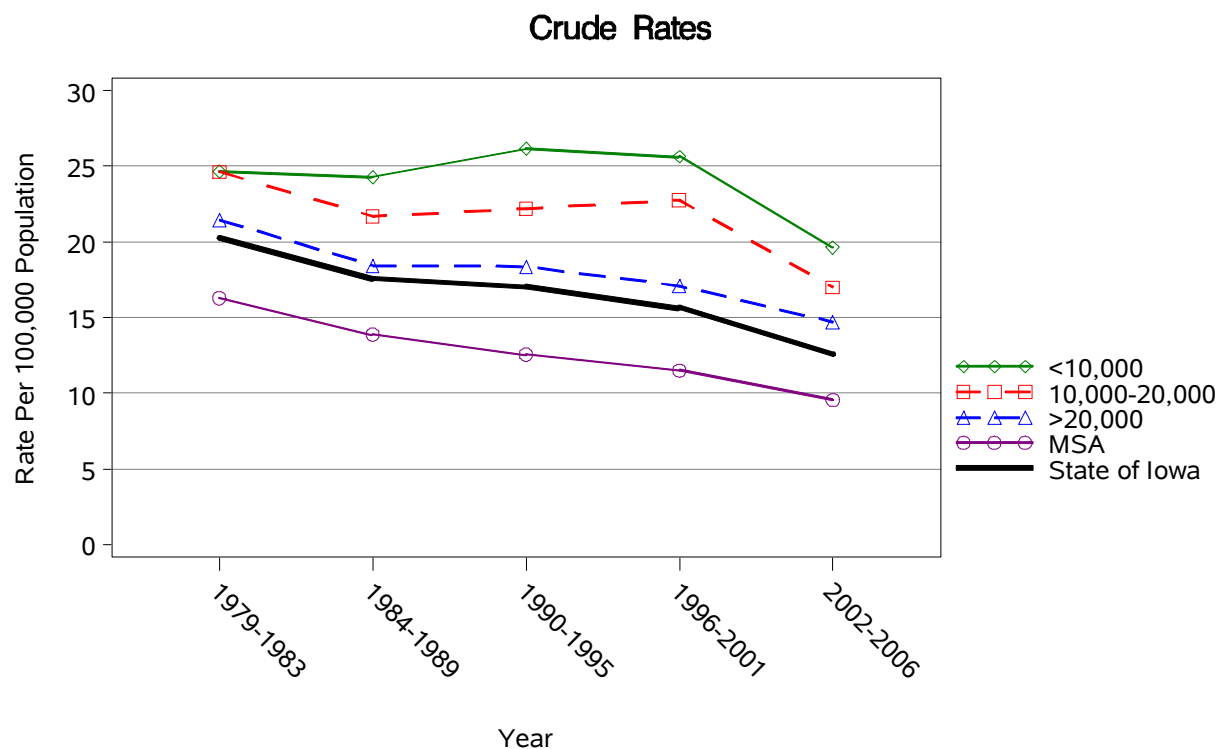
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	12	30.6	29.3	Lucas	10	21.0	20.4
	Adams	5	23.5	20.6	Monona	15	31.6	35.6
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	9	19.6	21.5	Osceola	*	*	*
	Davis	12	28.1	27.5	Palo Alto	7	14.5	16.8
	Decatur	7	16.5	18.8	Pocahontas	9	22.5	28.6
	Fremont	6	15.7	15.8	Ringgold	*	*	*
	Greene	6	12.1	10.6	Taylor	5	15.0	16.7
	Howard	8	16.5	17.7	Van Buren	14	36.5	36.8
	Humboldt	14	28.2	29.0	Wayne	11	33.8	35.1
	Ida	8	21.9	25.9	Worth	*	*	*
					Total	171	19.6	20.0
Counties with Average Population 10,000 – 20,000	Allamakee	10	13.8	14.6	Hardin	21	23.3	20.4
	Appanoose	13	19.5	21.6	Iowa	16	20.2	21.0
	Buena Vista	11	11.0	9.5	Jefferson	16	20.4	21.1
	Butler	13	17.6	19.2	Keokuk	13	23.5	24.2
	Calhoun	10	19.2	20.8	Kossuth	10	12.4	9.2
	Cass	10	14.2	14.4	Louisa	14	23.3	24.0
	Cedar	13	14.4	14.1	Lyon	8	13.9	11.7
	Cherokee	17	27.9	21.7	Mitchell	9	16.6	16.0
	Chickasaw	26	41.7	37.6	Montgomery	10	17.9	17.1
	Clay	10	11.8	11.8	O'Brien	12	16.6	16.2
	Clayton	17	18.9	19.8	Page	5	6.2	5.8
	Crawford	11	13.2	13.9	Poweshiek	19	20.3	18.0
	Delaware	11	12.4	12.7	Sac	9	16.7	19.5
	Dickinson	11	13.3	13.8	Shelby	6	9.5	9.9
	Emmet	6	11.3	11.2	Tama	16	17.9	17.1
	Floyd	9	10.9	10.3	Union	12	20.0	22.2
	Franklin	6	11.3	8.4	Winnebago	16	28.5	30.7
	Hamilton	15	18.7	17.7	Wright	14	20.7	21.4
	Hancock	6	10.3	10.5	Total	451	17.0	16.7
Counties with Average Population > 20,000	Boone	23	17.5	16.2	Lee	22	12.1	11.5
	Buchanan	16	15.4	15.4	Mahaska	15	13.5	12.9
	Carroll	17	16.2	14.8	Marion	23	14.2	13.2
	Cerro Gordo	29	13.0	13.0	Marshall	18	9.2	8.9
	Clinton	38	15.4	15.0	Muscatine	23	11.0	10.8
	Des Moines	19	9.3	8.7	Plymouth	22	17.9	17.2
	Fayette	27	25.6	23.4	Sioux	26	16.3	14.6
	Henry	24	23.9	21.9	Wapello	31	17.3	17.2
	Jackson	19	18.9	19.3	Webster	28	14.3	13.0
	Jasper	27	14.5	14.3	Winneshiek	13	12.4	9.7
					Total	460	14.7	14.0
MSA Counties	Benton	14	10.6	9.5	Linn	91	9.2	9.1
	Black Hawk	74	11.7	11.2	Madison	*	*	*
	Bremer	11	9.4	9.1	Mills	10	13.5	13.5
	Dallas	30	12.2	12.4	Polk	173	8.7	8.9
	Dubuque	37	8.2	7.9	Pottawattamie	27	6.1	5.9
	Grundy	13	21.2	19.5	Scott	68	8.5	8.5
	Guthrie	19	33.8	32.2	Story	36	8.7	9.2
	Harrison	19	24.5	24.8	Warren	25	11.8	11.4
	Johnson	37	6.2	6.4	Washington	16	15.2	15.4
	Jones	18	17.7	15.9	Woodbury	51	10.0	9.8
					Total	769-773	9.5-9.6	9.4
	State Total	1851-55	12.5-12.6	12.1				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: Iowa Department of Public Health via the State Health Registry of Iowa

* represents a count less than 5

Motor Vehicle Traffic Mortality by County Group 1979-2006



Suicides 2002-2006

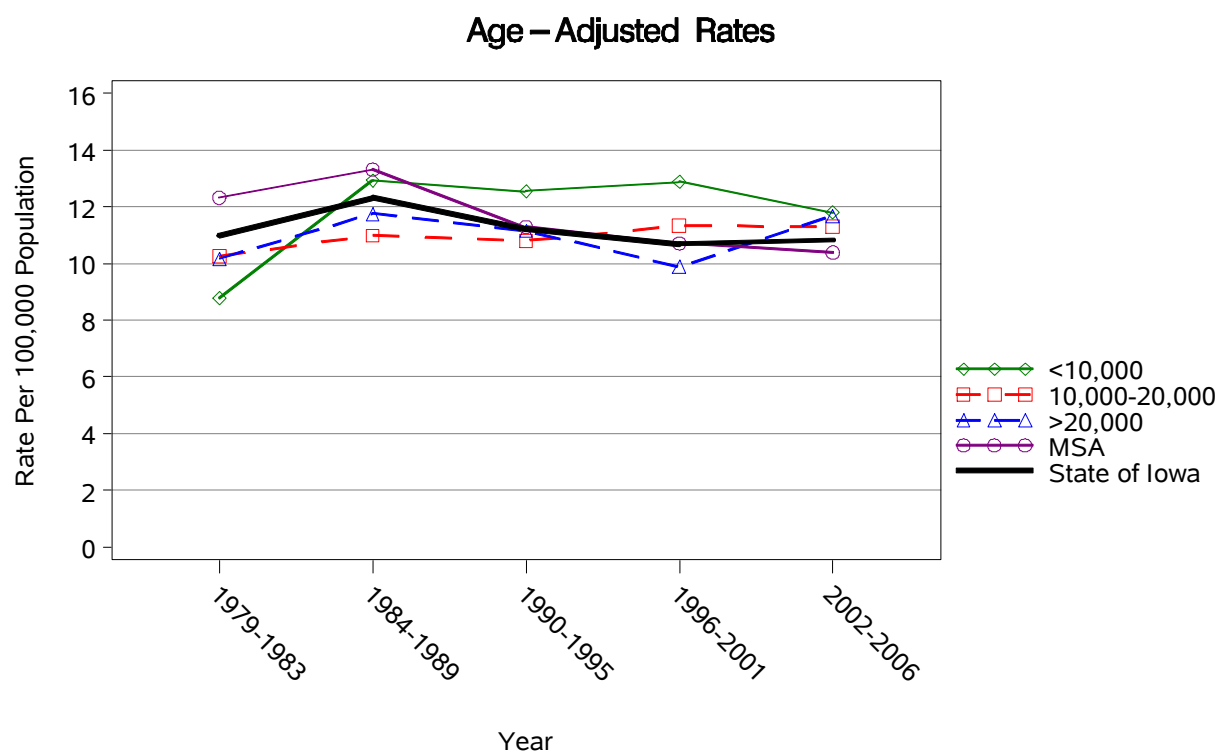
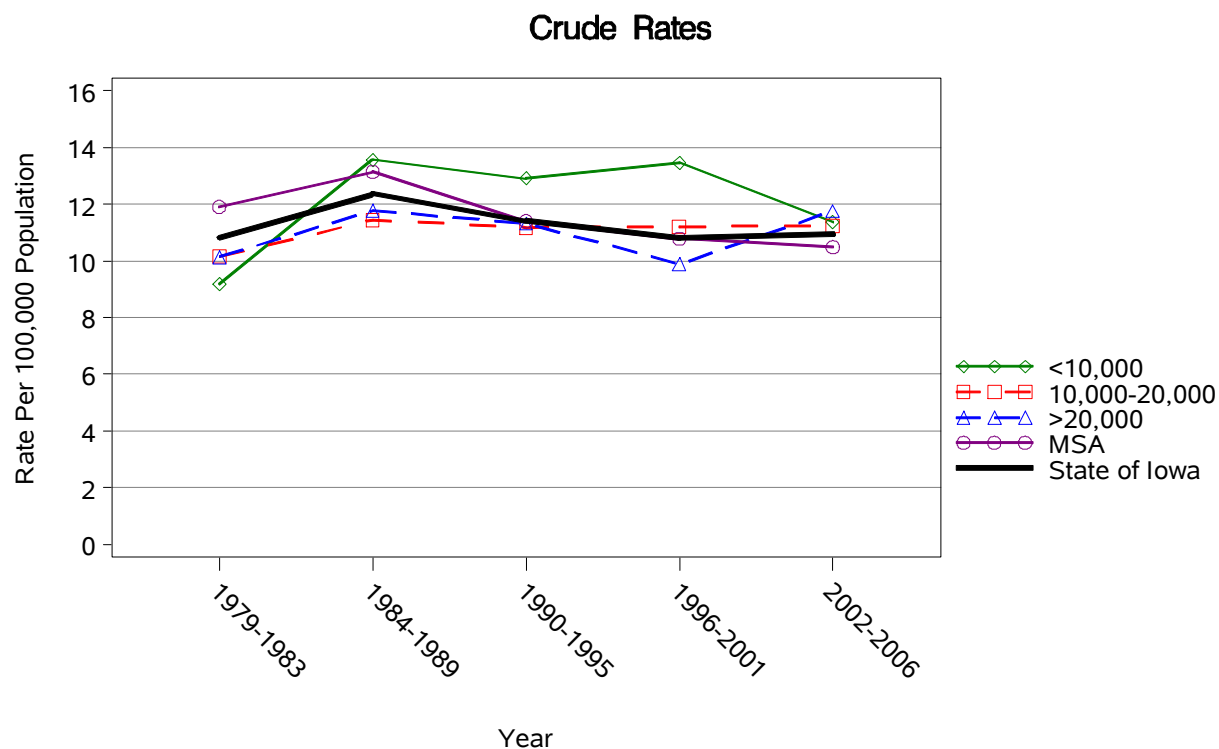
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	6	12.6	8.8
	Audubon	*	*	*	Monroe	5	12.9	12.3
	Clarke	8	17.5	17.9	Osceola	6	17.8	19.4
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	7	17.5	20.2
	Fremont	*	*	*	Ringgold	6	22.9	25.2
	Greene	*	*	*	Taylor	5	15.0	17.0
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	12	24.2	26.3	Wayne	5	15.4	16.0
	Ida	*	*	*	Worth	5	12.9	11.9
					Total	99	11.4	11.8
Counties with Average Population 10,000 – 20,000	Allamakee	6	8.3	8.3	Hardin	11	12.2	12.5
	Appanoose	9	13.5	14.8	Iowa	13	16.4	17.5
	Buena Vista	9	9.0	10.2	Jefferson	13	16.6	15.9
	Butler	10	13.5	13.8	Keokuk	7	12.6	13.0
	Calhoun	6	11.5	13.5	Kossuth	5	6.2	8.0
	Cass	7	9.9	8.7	Louisa	6	10.0	10.2
	Cedar	8	8.9	8.7	Lyon	6	10.4	11.8
	Cherokee	5	8.2	6.9	Mitchell	5	9.2	9.8
	Chickasaw	10	16.0	19.0	Montgomery	7	12.5	9.2
	Clay	8	9.5	9.1	O'Brien	9	12.5	11.6
	Clayton	13	14.4	13.6	Page	11	13.6	11.1
	Crawford	5	6.0	5.9	Poweshiek	5	5.3	4.3
	Delaware	5	5.6	5.9	Sac	10	18.6	16.0
	Dickinson	9	10.9	10.3	Shelby	*	*	*
	Emmet	9	17.0	16.6	Tama	12	13.4	14.2
	Floyd	12	14.6	13.3	Union	12	20.0	19.7
	Franklin	6	11.3	13.9	Winnebago	*	*	*
	Hamilton	6	7.5	7.3	Wright	10	14.8	16.4
	Hancock	5	8.6	10.0	Total	298	11.2	11.3
Counties with Average Population > 20,000	Boone	12	9.1	9.2	Lee	31	17.0	17.8
	Buchanan	11	10.6	11.2	Mahaska	17	15.3	14.5
	Carroll	12	11.4	10.9	Marion	16	9.9	8.9
	Cerro Gordo	31	13.9	13.6	Marshall	18	9.2	9.4
	Clinton	34	13.8	13.2	Muscatine	26	12.4	12.7
	Des Moines	29	14.2	13.9	Plymouth	15	12.2	13.3
	Fayette	13	12.3	13.5	Sioux	8	5.0	5.2
	Henry	10	10.0	9.5	Wapello	18	10.1	10.4
	Jackson	16	15.9	16.5	Webster	21	10.7	11.5
	Jasper	20	10.8	10.7	Winneshek	10	9.5	9.5
					Total	368	11.8	11.7
MSA Counties	Benton	8	6.1	6.3	Linn	108	10.9	10.7
	Black Hawk	54	8.5	8.8	Madison	11	14.9	15.2
	Bremer	13	11.1	10.6	Mills	*	*	*
	Dallas	18	7.3	7.6	Polk	218	11.0	11.0
	Dubuque	43	9.5	9.6	Pottawattamie	52	11.7	11.7
	Grundy	*	*	*	Scott	91	11.4	11.3
	Guthrie	12	21.3	21.5	Story	43	10.5	11.0
	Harrison	10	12.9	12.7	Warren	30	14.1	14.3
	Johnson	46	7.7	8.6	Washington	10	9.5	9.8
	Jones	11	10.8	10.6	Woodbury	63	12.3	12.5
					Total	848	10.5	10.4
State Total		1,613	10.9	10.8				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: Iowa Department of Public Health via the State Health Registry of Iowa

* represents a count less than 5

Suicides by County Group 1979-2006



Firearms Mortality 2002-2006

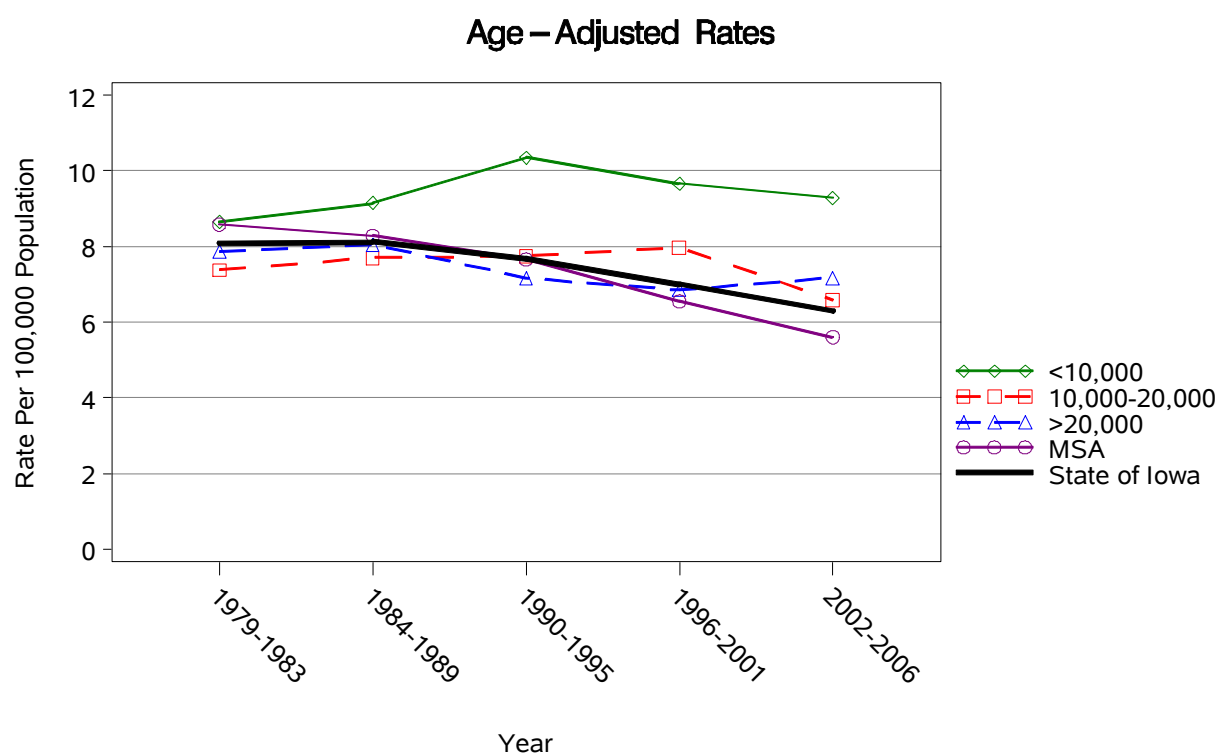
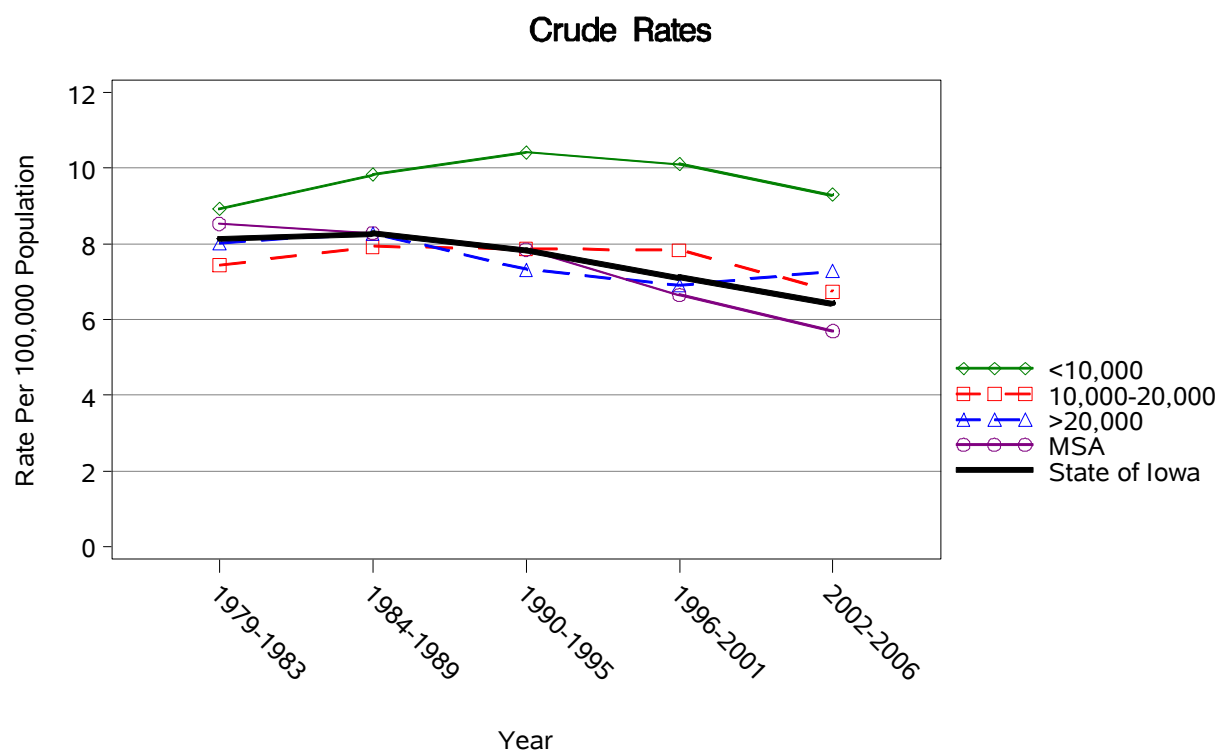
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	6	12.6	9.3
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	6	15.0	16.2
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	9	23.4	24.3
	Humboldt	8	16.1	17.8	Wayne	*	*	*
	Ida	*	*	*	Worth	5	12.9	13.2
					Total	81	9.3	9.3
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	7	7.8	6.5
	Appanoose	*	*	*	Iowa	10	12.6	13.6
	Buena Vista	*	*	*	Jefferson	6	7.7	6.5
	Butler	5	6.8	6.3	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	5	7.1	5.9	Louisa	5	8.3	8.9
	Cedar	6	6.7	6.8	Lyon	*	*	*
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	6	9.6	12.2	Montgomery	5	8.9	6.2
	Clay	5	5.9	6.0	O'Brien	6	8.3	7.5
	Clayton	9	10.0	9.2	Page	9	11.2	9.4
	Crawford	*	*	*	Poweshiek	*	*	*
	Delaware	*	*	*	Sac	9	16.7	16.7
	Dickinson	5	6.1	5.0	Shelby	*	*	*
	Emmet	8	15.1	14.7	Tama	5	5.6	5.8
	Floyd	7	8.5	6.9	Union	6	10.0	9.2
	Franklin	5	9.4	11.7	Winnebago	*	*	*
	Hamilton	5	6.2	6.3	Wright	7	10.3	12.1
	Hancock	*	*	*	Total	179	6.7	6.6
Counties with Average Population > 20,000	Boone	6	4.6	4.5	Lee	12	6.6	6.2
	Buchanan	8	7.7	7.6	Mahaska	7	6.3	6.1
	Carroll	10	9.5	9.4	Marion	9	5.6	5.1
	Cerro Gordo	18	8.0	7.7	Marshall	12	6.1	6.1
	Clinton	23	9.3	9.1	Muscatine	23	11.0	11.4
	Des Moines	24	11.7	11.8	Plymouth	13	10.6	11.7
	Fayette	7	6.6	6.6	Sioux	10	6.3	5.8
	Henry	*	*	*	Wapello	9	5.0	4.9
	Jackson	11	10.9	11.3	Webster	11	5.6	5.5
	Jasper	8	4.3	4.4	Winneshek	*	*	*
					Total	228	7.3	7.2
MSA Counties	Benton	*	*	*	Linn	53	5.3	5.3
	Black Hawk	34	5.4	5.0	Madison	7	9.5	9.5
	Bremer	7	6.0	5.4	Mills	5	6.8	6.2
	Dallas	13	5.3	5.2	Polk	121	6.1	6.2
	Dubuque	16	3.5	3.5	Pottawattamie	24	5.4	5.5
	Grundy	*	*	*	Scott	63	7.9	8.0
	Guthrie	9	16.0	15.9	Story	21	5.1	5.1
	Harrison	*	*	*	Warren	18	8.5	8.4
	Johnson	19	3.2	3.8	Washington	6	5.7	5.1
	Jones	7	6.9	7.1	Woodbury	29	5.7	5.8
					Total	461	5.7	5.6
State Total		949	6.4	6.3				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: Iowa Department of Public Health via the State Health Registry of Iowa

* represents a count less than 5

Firearms Mortality by County Group 1979-2006



Falls Mortality 2002-2006

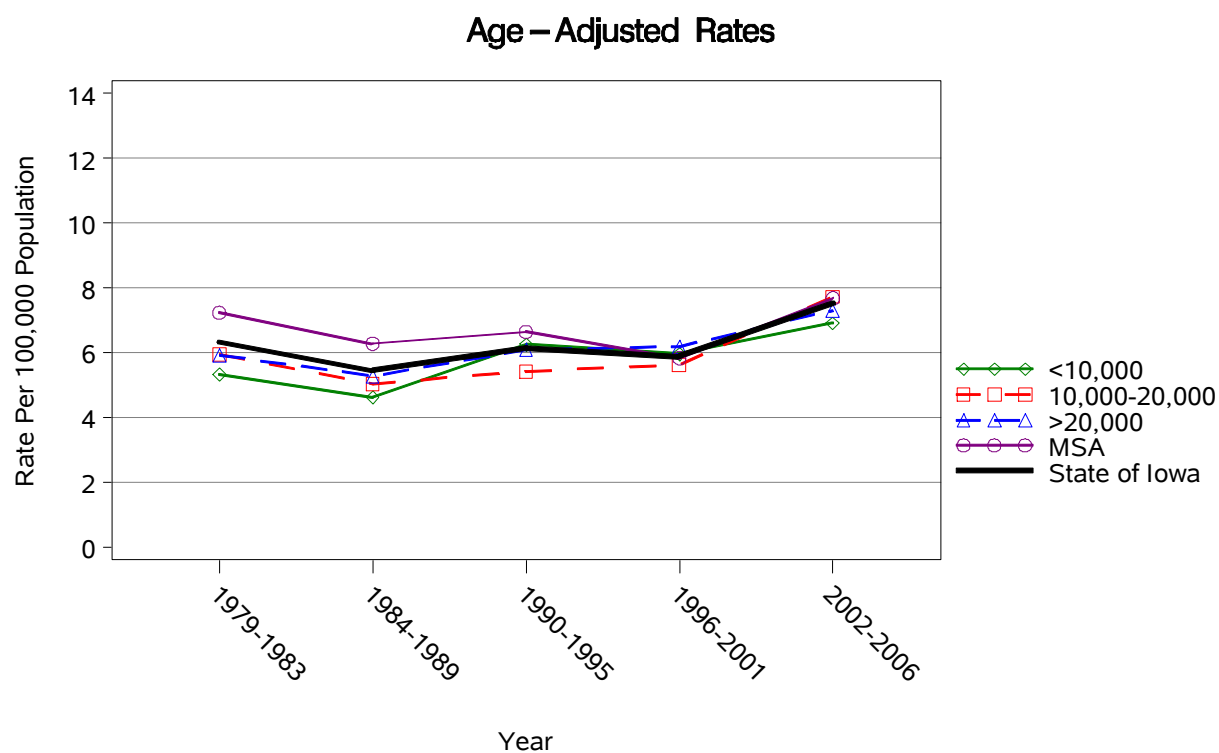
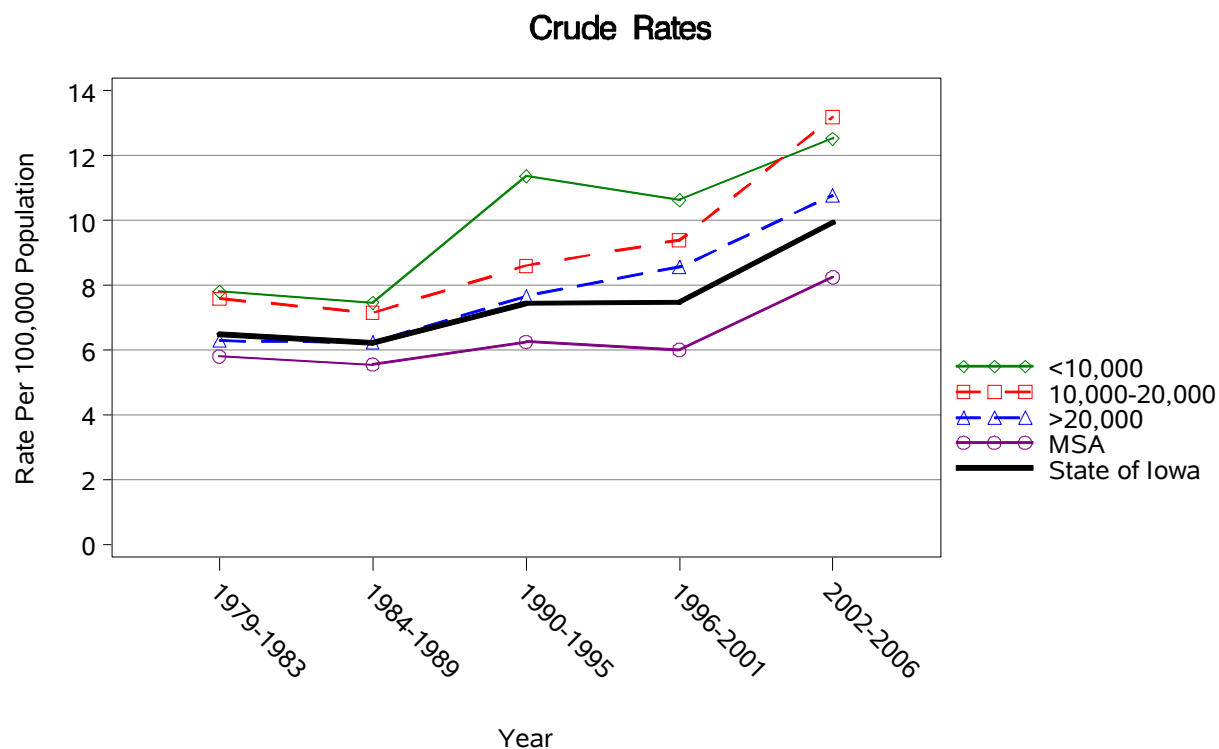
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	9	23.0	10.5	Lucas	*	*	*
	Adams	*	*	*	Monona	5	10.5	5.9
	Audubon	*	*	*	Monroe	7	18.1	10.8
	Clarke	6	13.1	9.4	Osceola	*	*	*
	Davis	5	11.7	8.3	Palo Alto	7	14.5	9.0
	Decatur	*	*	*	Pocahontas	6	15.0	5.7
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	8	16.2	6.3	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	5	10.1	5.5	Wayne	7	21.5	10.3
	Ida	9	24.7	11.3	Worth	*	*	*
					Total	109	12.5	6.9
Counties with Average Population 10,000 – 20,000	Allamakee	7	9.7	5.7	Hardin	14	15.5	9.0
	Appanoose	*	*	*	Iowa	6	7.6	5.0
	Buena Vista	13	13.1	8.9	Jefferson	12	15.3	12.1
	Butler	12	16.3	8.5	Keokuk	7	12.6	6.0
	Calhoun	11	21.1	10.1	Kossuth	7	8.7	4.7
	Cass	15	21.3	10.2	Louisa	5	8.3	6.1
	Cedar	11	12.2	8.7	Lyon	*	*	*
	Cherokee	8	13.1	7.6	Mitchell	7	12.9	6.8
	Chickasaw	13	20.8	12.2	Montgomery	6	10.7	6.4
	Clay	6	7.1	5.2	O'Brien	6	8.3	3.8
	Clayton	8	8.9	7.0	Page	7	8.7	5.4
	Crawford	9	10.8	6.9	Poweshiek	18	19.2	10.0
	Delaware	9	10.1	7.3	Sac	7	13.0	6.6
	Dickinson	15	18.2	9.7	Shelby	7	11.1	5.0
	Emmet	6	11.3	6.4	Tama	13	14.5	8.5
	Floyd	13	15.8	8.4	Union	5	8.3	4.6
	Franklin	15	28.3	18.0	Winnebago	8	14.2	8.0
	Hamilton	16	20.0	12.8	Wright	15	22.2	12.6
	Hancock	7	12.0	7.2	Total	350	13.2	7.7
Counties with Average Population > 20,000	Boone	12	9.1	6.8	Lee	32	17.6	11.8
	Buchanan	13	12.5	9.7	Mahaska	11	9.9	6.7
	Carroll	10	9.5	5.0	Marion	23	14.2	9.4
	Cerro Gordo	31	13.9	9.0	Marshall	30	15.3	10.3
	Clinton	10	4.0	2.7	Muscatine	19	9.1	8.5
	Des Moines	23	11.2	7.5	Plymouth	8	6.5	4.2
	Fayette	7	6.6	3.5	Sioux	6	3.8	2.8
	Henry	11	10.9	6.7	Wapello	21	11.7	8.3
	Jackson	6	6.0	4.1	Webster	30	15.4	9.5
	Jasper	25	13.4	9.5	Winneshek	9	8.6	5.3
					Total	337	10.8	7.3
MSA Counties	Benton	14	10.6	7.7	Linn	89	9.0	8.4
	Black Hawk	64	10.1	8.3	Madison	7	9.5	7.1
	Bremer	10	8.5	6.1	Mills	6	8.1	7.2
	Dallas	15	6.1	6.9	Polk	137	6.9	7.2
	Dubuque	43	9.5	7.0	Pottawattamie	27	6.1	5.5
	Grundy	7	11.4	6.6	Scott	91	11.4	11.3
	Guthrie	5	8.9	5.4	Story	16	3.9	4.0
	Harrison	6	7.7	4.7	Warren	16	7.5	7.0
	Johnson	41	6.9	9.8	Washington	17	16.1	8.9
	Jones	10	9.9	6.7	Woodbury	46	9.0	8.0
					Total	667	8.2	7.7
State Total		1,463	9.9	7.5				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: Iowa Department of Public Health via the State Health Registry of Iowa

* represents a count less than 5

Falls Mortality by County Group 1979-2006



Homicides 2002-2006

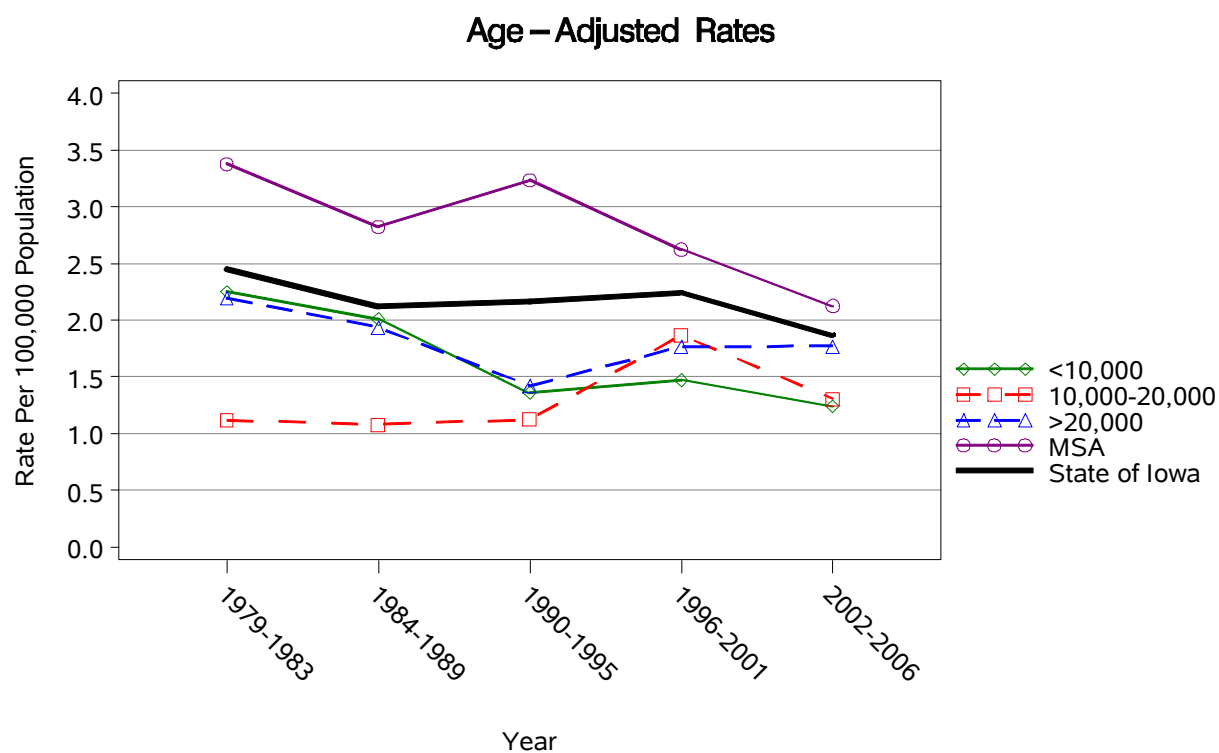
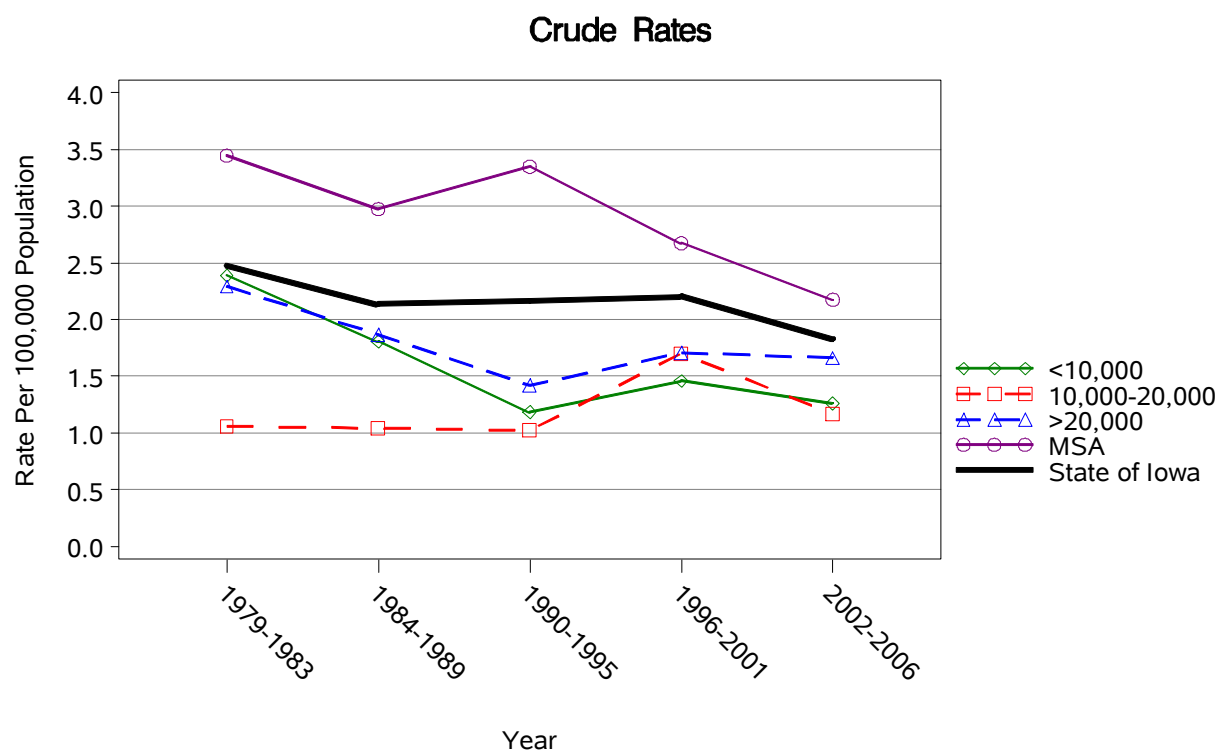
	County	#	Crude Rate ¹	Adjusted Rate ^{1,2}	County	#	Crude Rate ¹	Adjusted Rate ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	5	13.0	12.8
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	11	1.3	1.2
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	5	5.5	6.0
	Appanoose	*	*	*	Iowa	*	*	*
	Buena Vista	*	*	*	Jefferson	*	*	*
	Butler	*	*	*	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	*	*	*
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	*	*	*	Montgomery	*	*	*
	Clay	*	*	*	O'Brien	*	*	*
	Clayton	*	*	*	Page	*	*	*
	Crawford	*	*	*	Poweshiek	*	*	*
	Delaware	*	*	*	Sac	*	*	*
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	*	*	*	Tama	*	*	*
	Floyd	*	*	*	Union	*	*	*
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	*	*	*	Wright	*	*	*
	Hancock	*	*	*	Total	31	1.2	1.3
Counties with Average Population > 20,000	Boone	*	*	*	Lee	*	*	*
	Buchanan	*	*	*	Mahaska	*	*	*
	Carroll	*	*	*	Marion	*	*	*
	Cerro Gordo	*	*	*	Marshall	*	*	*
	Clinton	6	2.4	2.8	Muscatine	8	3.8	4.0
	Des Moines	9	4.4	4.4	Plymouth	*	*	*
	Fayette	*	*	*	Sioux	*	*	*
	Henry	*	*	*	Wapello	*	*	*
	Jackson	*	*	*	Webster	6	3.1	3.1
	Jasper	*	*	*	Winneshiek	*	*	*
					Total	52	1.7	1.8
MSA Counties	Benton	*	*	*	Linn	16	1.6	1.6
	Black Hawk	16	2.5	2.1	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	5	2.0	2.0	Polk	63	3.2	3.2
	Dubuque	7	1.5	1.7	Pottawattamie	12	2.7	2.8
	Grundy	*	*	*	Scott	31	3.9	3.9
	Guthrie	*	*	*	Story	*	*	*
	Harrison	*	*	*	Warren	*	*	*
	Johnson	*	*	*	Washington	*	*	*
	Jones	*	*	*	Woodbury	11	2.1	2.1
					Total	176	2.2	2.1
	State Total	270	1.8	1.9				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: Iowa Department of Public Health via the State Health Registry of Iowa

* represents a count less than 5

Homicides by County Group 1979-2006



Poisoning Mortality 2002-2006

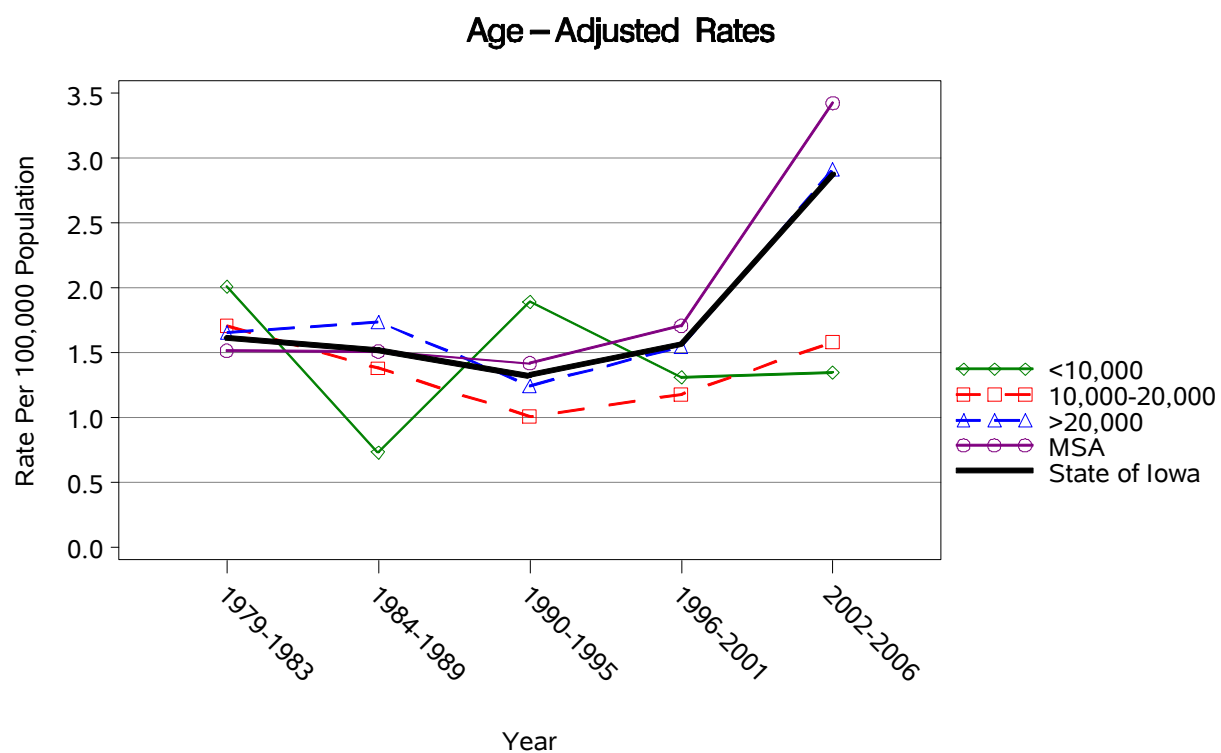
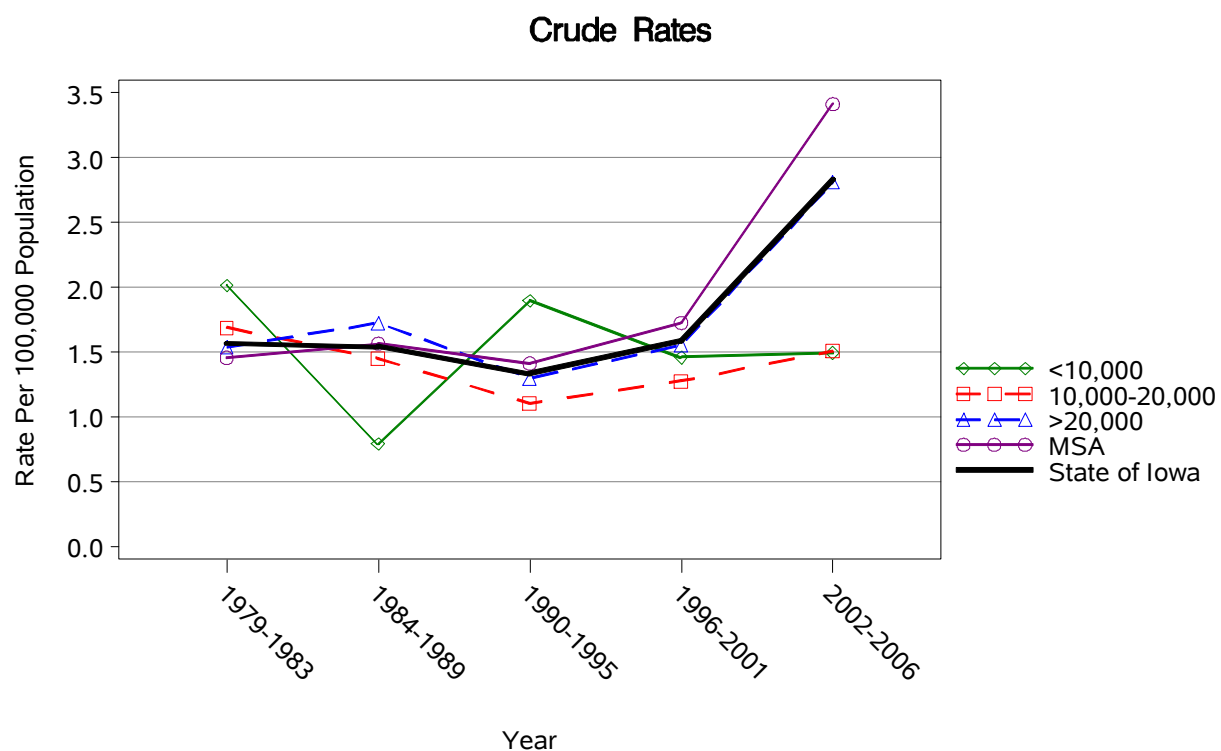
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	13	1.5	1.3
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Iowa	*	*	*
	Buena Vista	*	*	*	Jefferson	*	*	*
	Butler	*	*	*	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	*	*	*
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	*	*	*	Montgomery	*	*	*
	Clay	*	*	*	O'Brien	*	*	*
	Clayton	*	*	*	Page	*	*	*
	Crawford	*	*	*	Poweshiek	*	*	*
	Delaware	*	*	*	Sac	*	*	*
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	*	*	*	Tama	*	*	*
	Floyd	*	*	*	Union	*	*	*
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	*	*	*	Wright	*	*	*
	Hancock	*	*	*	Total	40	1.5	1.6
Counties with Average Population > 20,000	Boone	*	*	*	Lee	7	3.8	4.1
	Buchanan	*	*	*	Mahaska	5	4.5	5.2
	Carroll	*	*	*	Marion	5	3.1	3.2
	Cerro Gordo	9	4.0	3.7	Marshall	6	3.1	3.3
	Clinton	5	2.0	2.2	Muscatine	7	3.3	3.4
	Des Moines	*	*	*	Plymouth	*	*	*
	Fayette	*	*	*	Sioux	*	*	*
	Henry	*	*	*	Wapello	*	*	*
	Jackson	*	*	*	Webster	12	6.1	6.7
	Jasper	7	3.8	3.7	Winneshiek	*	*	*
					Total	88	2.8	2.9
MSA Counties	Benton	*	*	*	Linn	49	4.9	4.9
	Black Hawk	20	3.2	3.4	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	*	*	*	Polk	75	3.8	3.7
	Dubuque	8	1.8	2.0	Pottawattamie	15	3.4	3.5
	Grundy	*	*	*	Scott	33	4.1	4.1
	Guthrie	*	*	*	Story	6	1.5	1.9
	Harrison	*	*	*	Warren	6	2.8	3.1
	Johnson	26	4.3	4.5	Washington	*	*	*
	Jones	*	*	*	Woodbury	20	3.9	4.1
					Total	276	3.4	3.4
State Total		417	2.8	2.9				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: Iowa Department of Public Health via the State Health Registry of Iowa

* represents a count less than 5

Poisoning Mortality by County Group 1979-2006



Burns Mortality 2002-2006

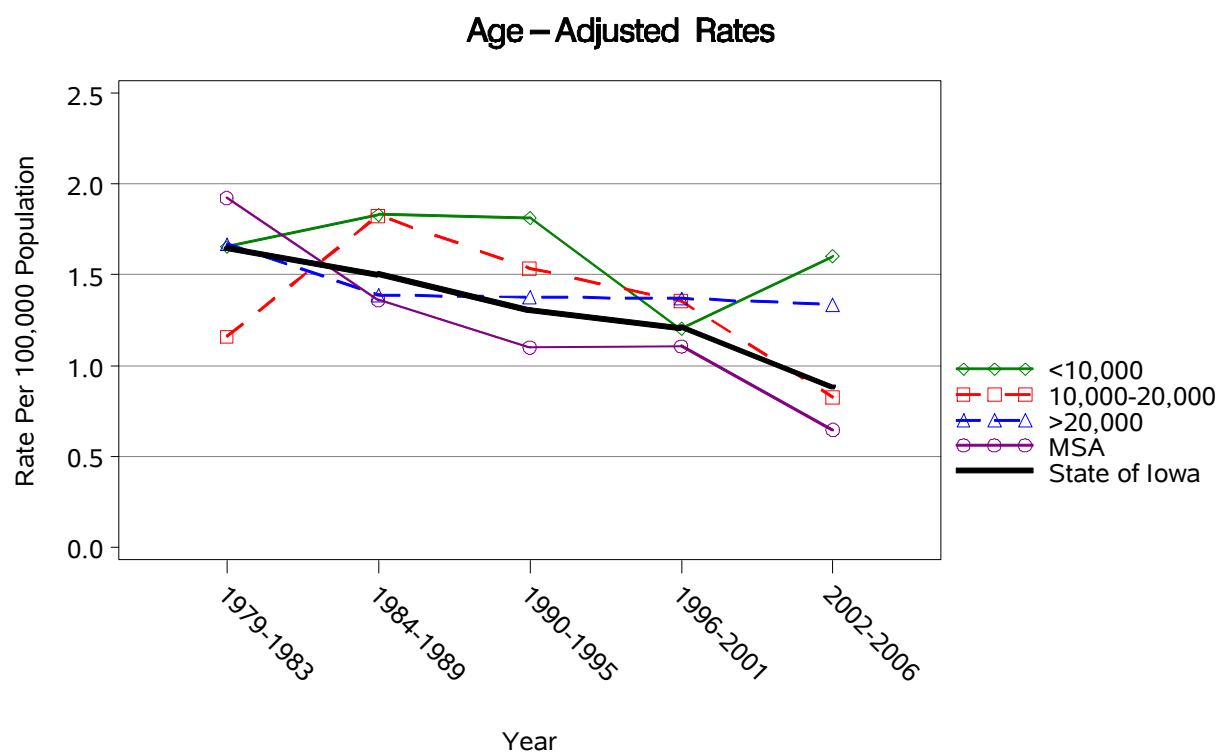
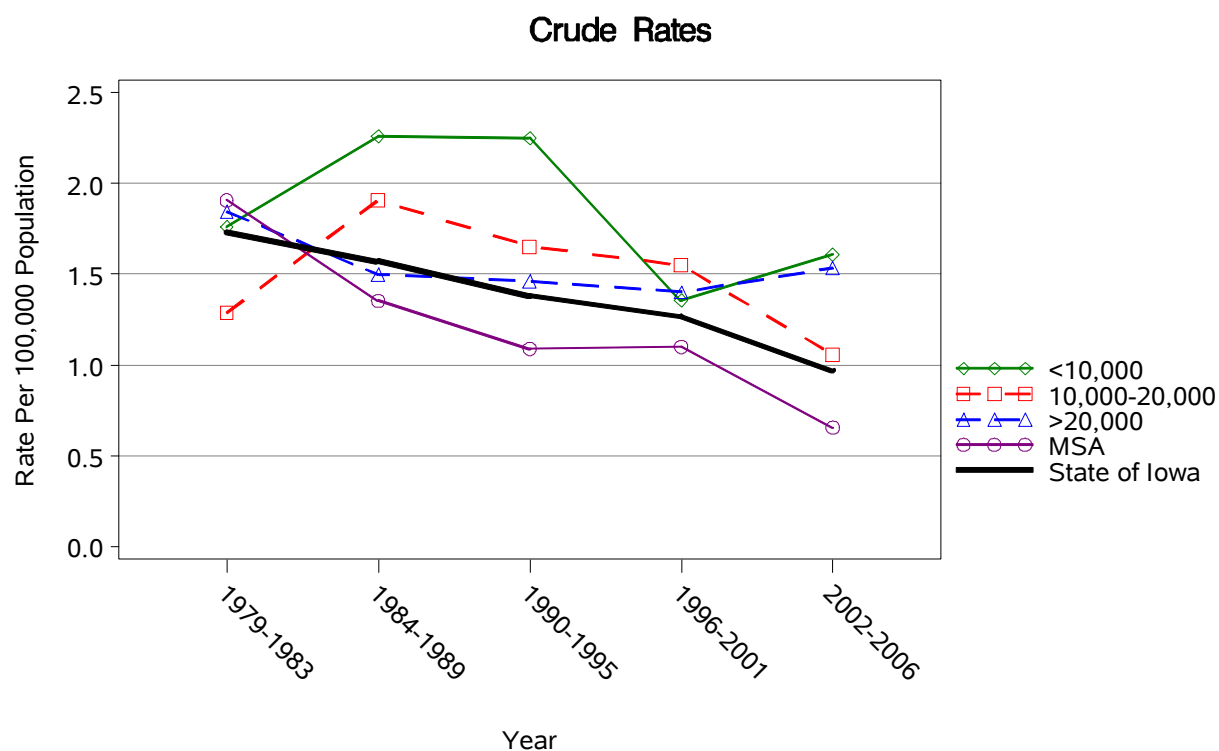
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	14	1.6	1.6
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Iowa	*	*	*
	Buena Vista	*	*	*	Jefferson	*	*	*
	Butler	*	*	*	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	*	*	*
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	*	*	*	Montgomery	*	*	*
	Clay	*	*	*	O'Brien	*	*	*
	Clayton	*	*	*	Page	*	*	*
	Crawford	*	*	*	Poweshiek	*	*	*
	Delaware	*	*	*	Sac	*	*	*
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	*	*	*	Tama	*	*	*
	Floyd	*	*	*	Union	*	*	*
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	*	*	*	Wright	*	*	*
	Hancock	*	*	*	Total	28	1.1	0.8
Counties with Average Population > 20,000	Boone	*	*	*	Lee	*	*	*
	Buchanan	*	*	*	Mahaska	*	*	*
	Carroll	*	*	*	Marion	*	*	*
	Cerro Gordo	*	*	*	Marshall	*	*	*
	Clinton	7	2.8	2.6	Muscatine	5	2.4	2.5
	Des Moines	*	*	*	Plymouth	*	*	*
	Fayette	*	*	*	Sioux	*	*	*
	Henry	*	*	*	Wapello	*	*	*
	Jackson	*	*	*	Webster	*	*	*
	Jasper	5	2.7	2.3	Winneshiek	*	*	*
					Total	48	1.5	1.3
MSA Counties	Benton	*	*	*	Linn	*	*	*
	Black Hawk	*	*	*	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	*	*	*	Polk	9	0.5	0.5
	Dubuque	*	*	*	Pottawattamie	*	*	*
	Grundy	*	*	*	Scott	8	1.0	1.0
	Guthrie	*	*	*	Story	5	1.2	1.2
	Harrison	*	*	*	Warren	*	*	*
	Johnson	5	0.8	1.1	Washington	*	*	*
	Jones	*	*	*	Woodbury	*	*	*
					Total	53	0.7	0.6
State Total		143	1.0	0.9				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: Iowa Department of Public Health via the State Health Registry of Iowa

* represents a count less than 5

Burns Mortality by County Group 1979-2006



Drowning Mortality 2002-2006

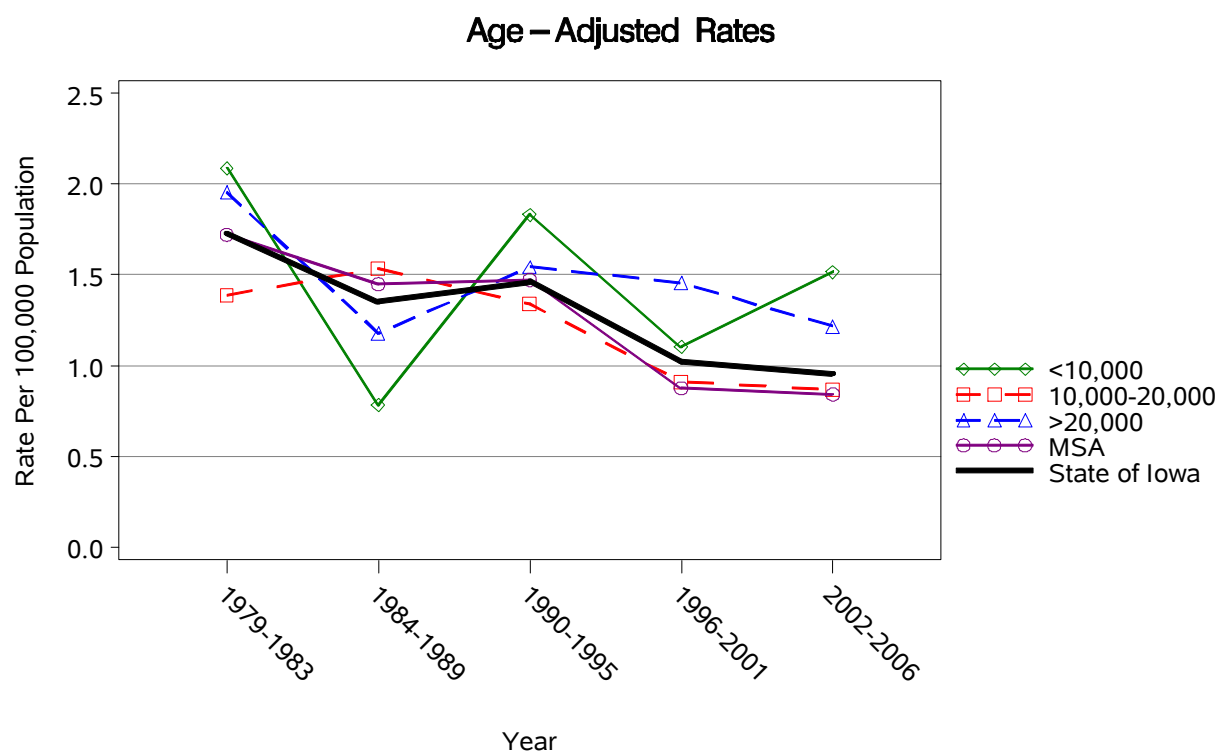
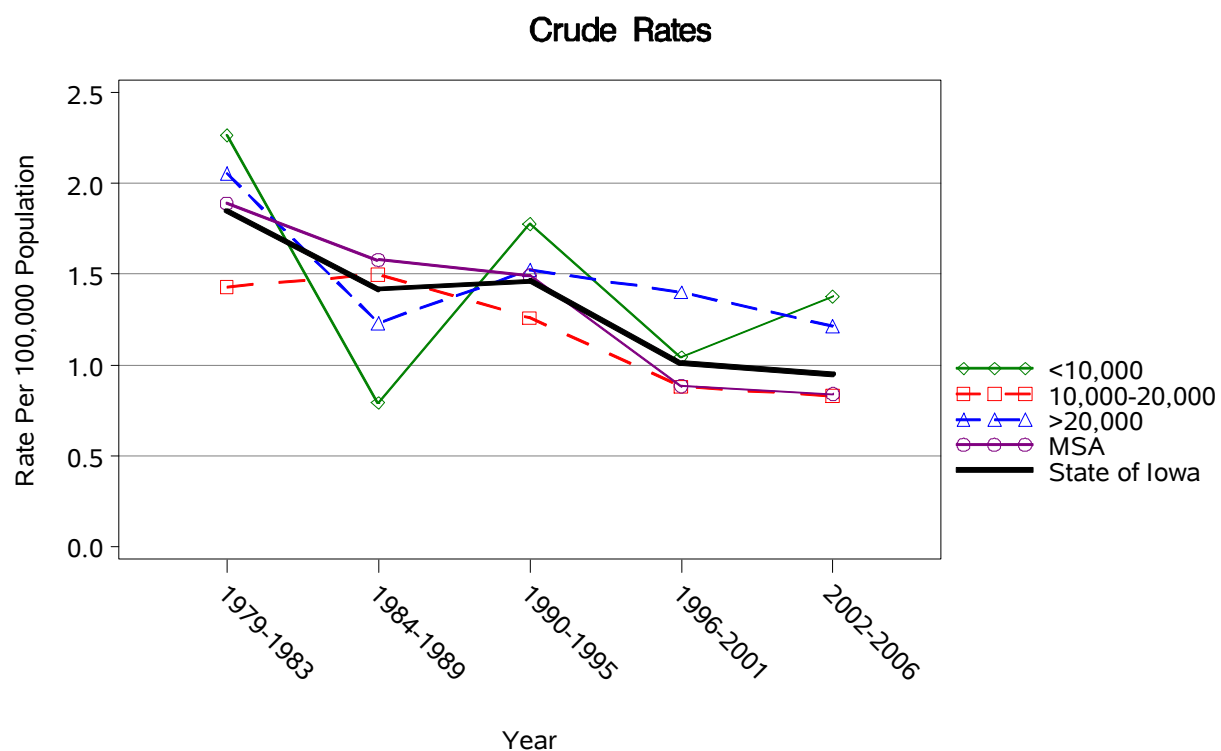
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	12	1.4	1.5
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Iowa	*	*	*
	Buena Vista	*	*	*	Jefferson	*	*	*
	Butler	*	*	*	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	*	*	*
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	*	*	*	Montgomery	*	*	*
	Clay	*	*	*	O'Brien	*	*	*
	Clayton	*	*	*	Page	*	*	*
	Crawford	*	*	*	Poweshiek	*	*	*
	Delaware	*	*	*	Sac	*	*	*
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	*	*	*	Tama	*	*	*
	Floyd	*	*	*	Union	*	*	*
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	*	*	*	Wright	*	*	*
	Hancock	*	*	*	Total	22	0.8	0.9
Counties with Average Population > 20,000	Boone	*	*	*	Lee	*	*	*
	Buchanan	*	*	*	Mahaska	*	*	*
	Carroll	*	*	*	Marion	*	*	*
	Cerro Gordo	*	*	*	Marshall	*	*	*
	Clinton	*	*	*	Muscatine	*	*	*
	Des Moines	*	*	*	Plymouth	*	*	*
	Fayette	*	*	*	Sioux	*	*	*
	Henry	*	*	*	Wapello	*	*	*
	Jackson	*	*	*	Webster	*	*	*
	Jasper	*	*	*	Winneshiek	*	*	*
					Total	38	1.2	1.2
MSA Counties	Benton	*	*	*	Linn	11	1.1	1.2
	Black Hawk	5	0.8	0.8	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	*	*	*	Polk	13	0.7	0.6
	Dubuque	*	*	*	Pottawattamie	*	*	*
	Grundy	*	*	*	Scott	6	0.8	0.8
	Guthrie	*	*	*	Story	*	*	*
	Harrison	*	*	*	Warren	*	*	*
	Johnson	*	*	*	Washington	*	*	*
	Jones	*	*	*	Woodbury	7	1.4	1.3
					Total	68	0.8	0.8
State Total		140	0.9	1.0				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: Iowa Department of Public Health via the State Health Registry of Iowa

* represents a count less than 5

Drowning Mortality by County Group 1979-2006



All Other Unintentional Mortality 2002-2006

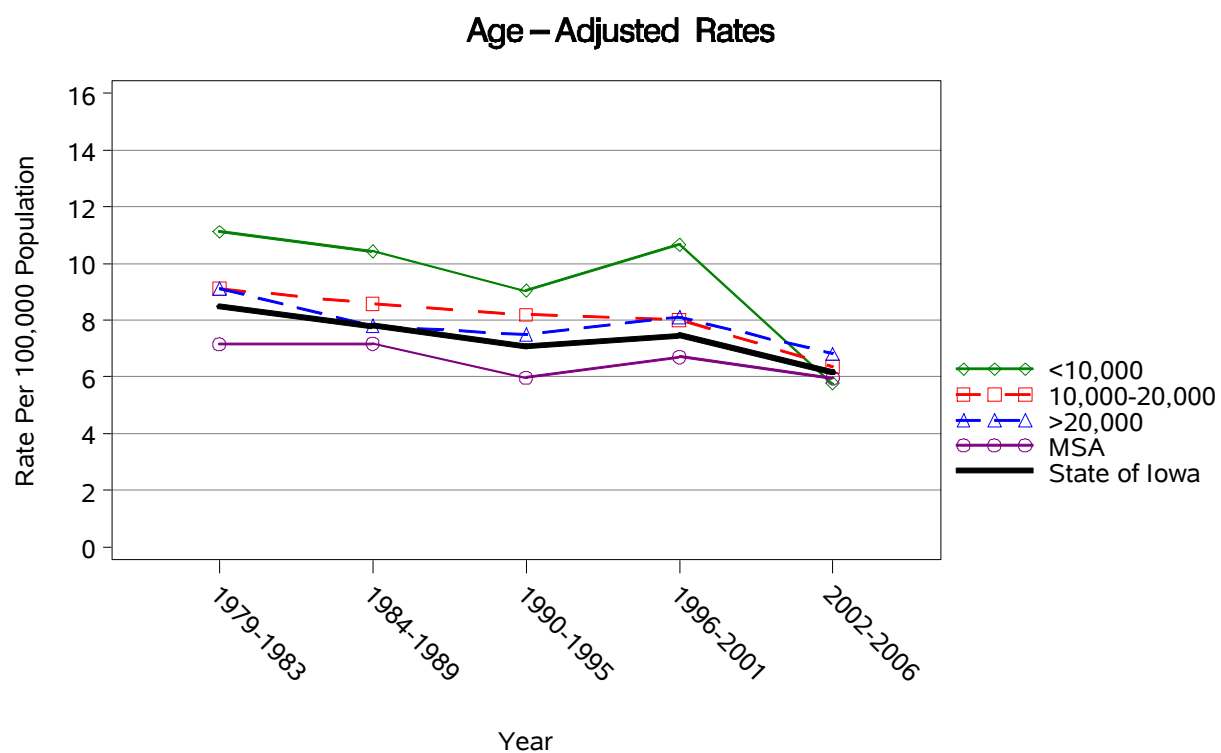
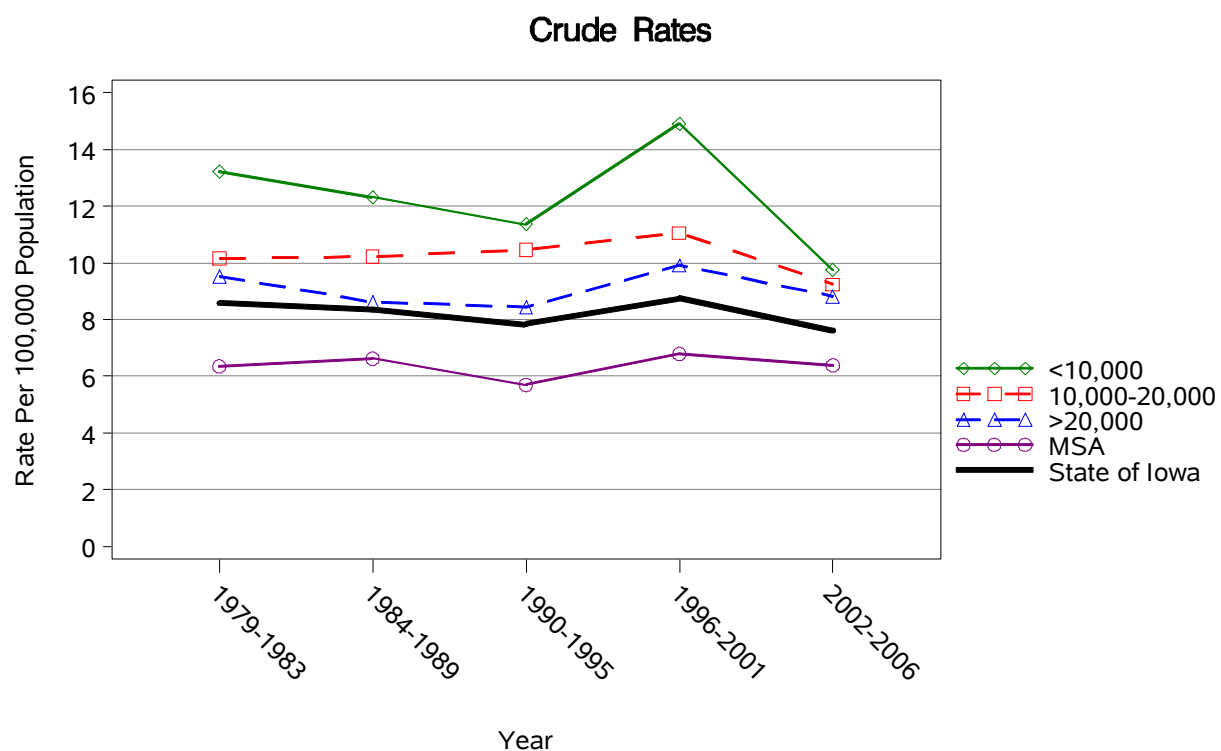
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	5	12.8	6.0	Lucas	5	10.5	5.1
	Adams	*	*	*	Monona	6	12.6	4.6
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	6	17.8	12.8
	Davis	6	14.1	12.3	Palo Alto	7	14.5	9.0
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	5	10.1	3.8	Taylor	5	15.0	7.4
	Howard	*	*	*	Van Buren	9	23.4	16.3
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	6	16.4	8.6	Worth	*	*	*
					Total	85	9.8	5.8
Counties with Average Population 10,000 – 20,000	Allamakee	9	12.4	7.5	Hardin	9	10.0	5.1
	Appanoose	8	12.0	8.1	Iowa	6	7.6	5.9
	Buena Vista	7	7.0	6.5	Jefferson	*	*	*
	Butler	*	*	*	Keokuk	6	10.8	6.8
	Calhoun	5	9.6	8.0	Kossuth	9	11.2	8.8
	Cass	10	14.2	8.6	Louisa	8	13.3	8.3
	Cedar	7	7.8	6.4	Lyon	*	*	*
	Cherokee	8	13.1	9.0	Mitchell	9	16.6	11.3
	Chickasaw	7	11.2	8.1	Montgomery	6	10.7	5.1
	Clay	10	11.8	8.5	O'Brien	7	9.7	5.2
	Clayton	8	8.9	6.9	Page	*	*	*
	Crawford	11	13.2	8.8	Poweshiek	11	11.7	7.9
	Delaware	5	5.6	5.1	Sac	*	*	*
	Dickinson	5	6.1	4.5	Shelby	7	11.1	5.9
	Emmet	*	*	*	Tama	7	7.8	6.8
	Floyd	*	*	*	Union	7	11.7	9.2
	Franklin	*	*	*	Winnebago	5	8.9	5.9
	Hamilton	9	11.2	6.8	Wright	9	13.3	8.3
	Hancock	5	8.6	5.4	Total	245	9.2	6.4
Counties with Average Population > 20,000	Boone	18	13.7	9.9	Lee	15	8.2	5.8
	Buchanan	8	7.7	6.1	Mahaska	7	6.3	5.4
	Carroll	11	10.5	6.2	Marion	14	8.6	6.3
	Cerro Gordo	25	11.2	8.1	Marshall	24	12.3	10.0
	Clinton	16	6.5	5.6	Muscatine	14	6.7	6.2
	Des Moines	15	7.3	5.1	Plymouth	16	13.0	10.3
	Fayette	*	*	*	Sioux	8	5.0	3.8
	Henry	13	12.9	12.5	Wapello	16	8.9	7.3
	Jackson	6	6.0	4.6	Webster	24	12.3	9.0
	Jasper	12	6.5	4.9	Winneshiek	10	9.5	7.5
					Total	272-276	8.7-8.8	6.8
MSA Counties	Benton	14	10.6	9.7	Linn	81	8.1	7.5
	Black Hawk	55	8.7	7.2	Madison	8	10.9	9.5
	Bremer	6	5.1	3.5	Mills	8	10.8	10.1
	Dallas	13	5.3	5.6	Polk	104	5.2	5.3
	Dubuque	25	5.5	4.8	Pottawattamie	21	4.7	4.2
	Grundy	8	13.0	10.4	Scott	52	6.5	6.5
	Guthrie	*	*	*	Story	20	4.9	5.0
	Harrison	8	10.3	9.4	Warren	13	6.1	5.7
	Johnson	18	3.0	3.9	Washington	15	14.2	7.6
	Jones	14	13.8	12.0	Woodbury	30	5.9	5.3
					Total	513-517	6.3-6.4	6.0
State Total		1,115-23	7.5-7.6	6.2				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: Iowa Department of Public Health via the State Health Registry of Iowa

* represents a count less than 5

All Other Unintentional Mortality by County Group 1979-2006



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Youth Injury Mortality

Injuries remain the leading cause of death in persons age 1-34 years and contribute the most to years of life lost (YLL), particularly for those events of pre-adult ages. Deaths from unintentional injuries, homicides, and suicides are important public health problems in those 15-24 years of age and many of these deaths are preventable.

Transportation fatalities accounted for 118 deaths for youth aged 0-14 from 2002-2006. Of these, 79% were due to motor vehicle traffic death. In the 15-19 age range, 238 transportation deaths occurred over this same period with 97% accounted for by motor vehicle traffic deaths. In general, transportation mortality rates are higher in the more rural counties for both age groups. For 15-19 year-olds during 2002 through 2006, the mortality rate in the most rural of counties was almost double that of the state. Tables other than transportation are not presented due to the small number of events in both age ranges.

HIGHLIGHTS...

- ✓ Unintentional injuries, homicides, and suicides are important public health problems in those 15-24 years of age.
- ✓ Injuries contribute the most to years of life lost (YLL).
- ✓ Motor vehicle deaths accounted for 97% of all transportation deaths in youth aged 15-19 in Iowa.

The cause of death data are obtained from death certificates filed at the Iowa Department of Public Health. Analysis was done by the State Health Registry of Iowa at the University of Iowa. Crude and age-adjusted rates for ages 15-19 are identical to one another because only one age group in the age-adjustment analysis is represented. The crude and age-adjusted rates for the 0-14 age group show only slight differences as this represents four age groups (< 1, 1-4, 5-9, and 10-14) in the age-adjustment analysis. We therefore display only crude rates in the tables and graphs.

Age 0-14: All Transportation Mortality 2002-2006

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Lucas	*	*
	Adams	*	*	Monona	*	*
	Audubon	*	*	Monroe	*	*
	Clarke	*	*	Osceola	*	*
	Davis	*	*	Palo Alto	*	*
	Decatur	*	*	Pocahontas	*	*
	Fremont	*	*	Ringgold	*	*
	Greene	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Humboldt	*	*	Wayne	*	*
	Ida	*	*	Worth	*	*
				Total	10	6.2
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Iowa	*	*
	Buena Vista	*	*	Jefferson	*	*
	Butler	*	*	Keokuk	*	*
	Calhoun	*	*	Kossuth	*	*
	Cass	*	*	Louisa	*	*
	Cedar	*	*	Lyon	*	*
	Cherokee	*	*	Mitchell	*	*
	Chickasaw	*	*	Montgomery	*	*
	Clay	*	*	O'Brien	*	*
	Clayton	*	*	Page	*	*
	Crawford	*	*	Poweshiek	*	*
	Delaware	*	*	Sac	*	*
	Dickinson	*	*	Shelby	*	*
	Emmet	*	*	Tama	*	*
	Floyd	*	*	Union	*	*
	Franklin	*	*	Winnebago	*	*
	Hamilton	*	*	Wright	*	*
	Hancock	*	*	Total	30	6.0
Counties with Average Population > 20,000	Boone	*	*	Lee	*	*
	Buchanan	*	*	Mahaska	*	*
	Carroll	*	*	Marion	*	*
	Cerro Gordo	*	*	Marshall	*	*
	Clinton	*	*	Muscatine	*	*
	Des Moines	*	*	Plymouth	*	*
	Fayette	*	*	Sioux	*	*
	Henry	*	*	Wapello	*	*
	Jackson	*	*	Webster	*	*
	Jasper	*	*	Winneshiek	*	*
				Total	28	4.6
MSA Counties	Benton	*	*	Linn	7	3.3
	Black Hawk	*	*	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	*	*	Polk	14	3.2
	Dubuque	*	*	Pottawattamie	*	*
	Grundy	*	*	Scott	*	*
	Guthrie	*	*	Story	*	*
	Harrison	*	*	Warren	*	*
	Johnson	*	*	Washington	*	*
	Jones	*	*	Woodbury	9	7.7
				Total	50	3.0
	State Total	118	4.0			

¹Rates per 100,000 PopulationSource: Iowa Department of Public Health via the State Health Registry of Iowa
* represents a count less than 5

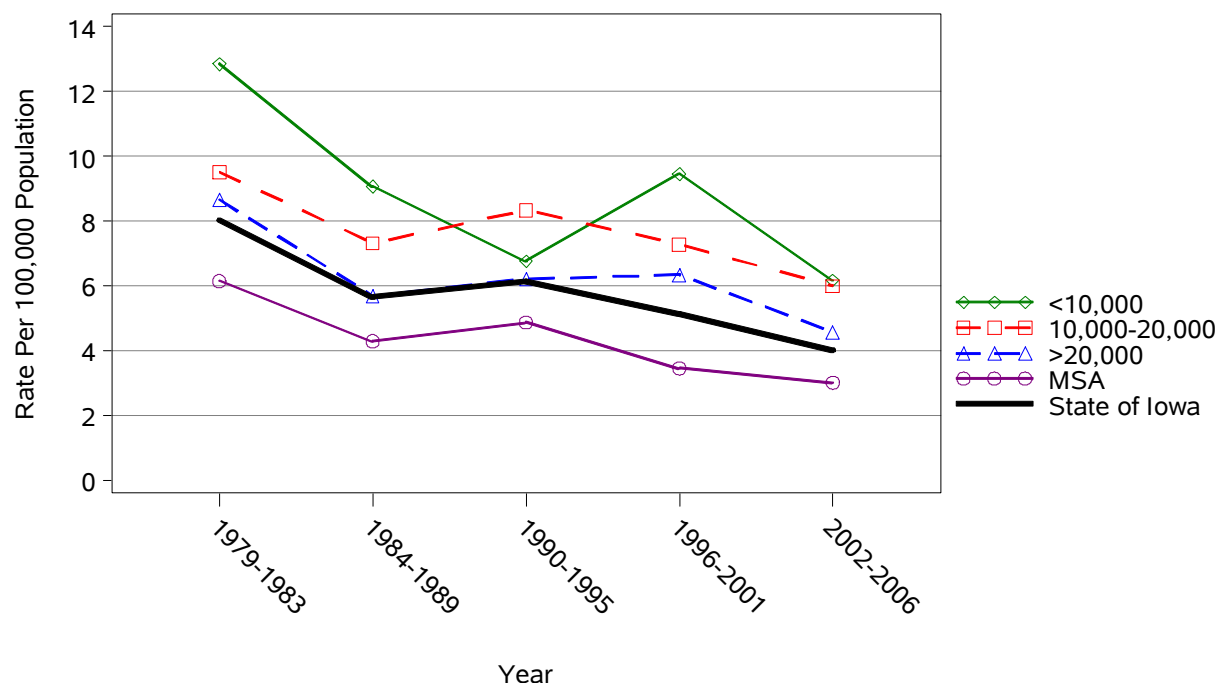
Age 15-19: All Transportation Mortality 2002-2006

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Lucas	*	*
	Adams	*	*	Monona	*	*
	Audubon	*	*	Monroe	*	*
	Clarke	*	*	Osceola	*	*
	Davis	*	*	Palo Alto	*	*
	Decatur	*	*	Pocahontas	*	*
	Fremont	*	*	Ringgold	*	*
	Greene	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Humboldt	*	*	Wayne	*	*
	Ida	*	*	Worth	*	*
				Total	26	40.8
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Iowa	*	*
	Buena Vista	*	*	Jefferson	*	*
	Butler	*	*	Keokuk	*	*
	Calhoun	*	*	Kossuth	*	*
	Cass	*	*	Louisa	*	*
	Cedar	*	*	Lyon	*	*
	Cherokee	*	*	Mitchell	*	*
	Chickasaw	*	*	Montgomery	*	*
	Clay	*	*	O'Brien	*	*
	Clayton	*	*	Page	*	*
	Crawford	*	*	Poweshiek	5	62.0
	Delaware	*	*	Sac	*	*
	Dickinson	*	*	Shelby	*	*
	Emmet	*	*	Tama	*	*
	Floyd	*	*	Union	*	*
	Franklin	*	*	Winnebago	*	*
	Hamilton	*	*	Wright	*	*
	Hancock	*	*	Total	64	33.0
Counties with Average Population > 20,000	Boone	*	*	Lee	*	*
	Buchanan	*	*	Mahaska	*	*
	Carroll	6	75.0	Marion	5	38.3
	Cerro Gordo	5	31.5	Marshall	*	*
	Clinton	*	*	Muscatine	*	*
	Des Moines	*	*	Plymouth	*	*
	Fayette	*	*	Sioux	*	*
	Henry	*	*	Wapello	6	49.8
	Jackson	*	*	Webster	*	*
	Jasper	*	*	Winneshiek	*	*
				Total	48	20.7
MSA Counties	Benton	*	*	Linn	11	16.2
	Black Hawk	*	*	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	5	32.2	Polk	24	18.9
	Dubuque	5	14.3	Pottawattamie	*	*
	Grundy	*	*	Scott	10	17.5
	Guthrie	*	*	Story	*	*
	Harrison	*	*	Warren	8	48.0
	Johnson	9	16.1	Washington	*	*
	Jones	*	*	Woodbury	*	*
				Total	100	16.8
	State Total	238	22.0			

¹Rates per 100,000 PopulationSource: Iowa Department of Public Health via the State Health Registry of Iowa
* represents a count less than 5

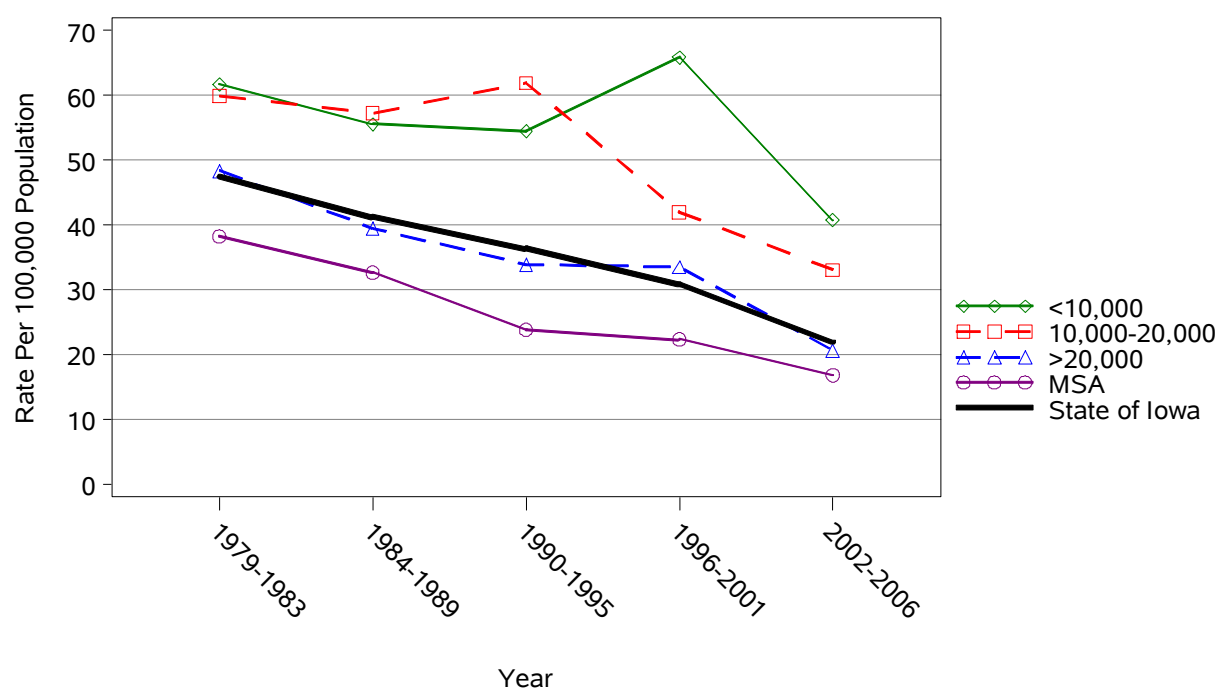
Age 0-14: All Transportation Mortality by County Group 1979-2006

Crude Rates



Age 15-19: All Transportation Mortality by County Group 1979-2006

Crude Rates



Age 0-14: Motor Vehicle Traffic Mortality 2002-2006

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Lucas	*	*
	Adams	*	*	Monona	*	*
	Audubon	*	*	Monroe	*	*
	Clarke	*	*	Osceola	*	*
	Davis	*	*	Palo Alto	*	*
	Decatur	*	*	Pocahontas	*	*
	Fremont	*	*	Ringgold	*	*
	Greene	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Humboldt	*	*	Wayne	*	*
	Ida	*	*	Worth	*	*
				Total	8	4.9
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Iowa	*	*
	Buena Vista	*	*	Jefferson	*	*
	Butler	*	*	Keokuk	*	*
	Calhoun	*	*	Kossuth	*	*
	Cass	*	*	Louisa	*	*
	Cedar	*	*	Lyon	*	*
	Cherokee	*	*	Mitchell	*	*
	Chickasaw	*	*	Montgomery	*	*
	Clay	*	*	O'Brien	*	*
	Clayton	*	*	Page	*	*
	Crawford	*	*	Poweshiek	*	*
	Delaware	*	*	Sac	*	*
	Dickinson	*	*	Shelby	*	*
	Emmet	*	*	Tama	*	*
	Floyd	*	*	Union	*	*
	Franklin	*	*	Winnebago	*	*
	Hamilton	*	*	Wright	*	*
	Hancock	*	*	Total	26	5.2
Counties with Average Population > 20,000	Boone	*	*	Lee	*	*
	Buchanan	*	*	Mahaska	*	*
	Carroll	*	*	Marion	*	*
	Cerro Gordo	*	*	Marshall	*	*
	Clinton	*	*	Muscatine	*	*
	Des Moines	*	*	Plymouth	*	*
	Fayette	*	*	Sioux	*	*
	Henry	*	*	Wapello	*	*
	Jackson	*	*	Webster	*	*
	Jasper	*	*	Winneshiek	*	*
				Total	19	3.1
MSA Counties	Benton	*	*	Linn	*	*
	Black Hawk	*	*	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	*	*	Polk	11	2.5
	Dubuque	*	*	Pottawattamie	*	*
	Grundy	*	*	Scott	*	*
	Guthrie	*	*	Story	*	*
	Harrison	*	*	Warren	*	*
	Johnson	*	*	Washington	*	*
	Jones	*	*	Woodbury	8	6.8
				Total	40	2.4
	State Total	93	3.2			

¹Rates per 100,000 PopulationSource: Iowa Department of Public Health via the State Health Registry of Iowa
* represents a count less than 5

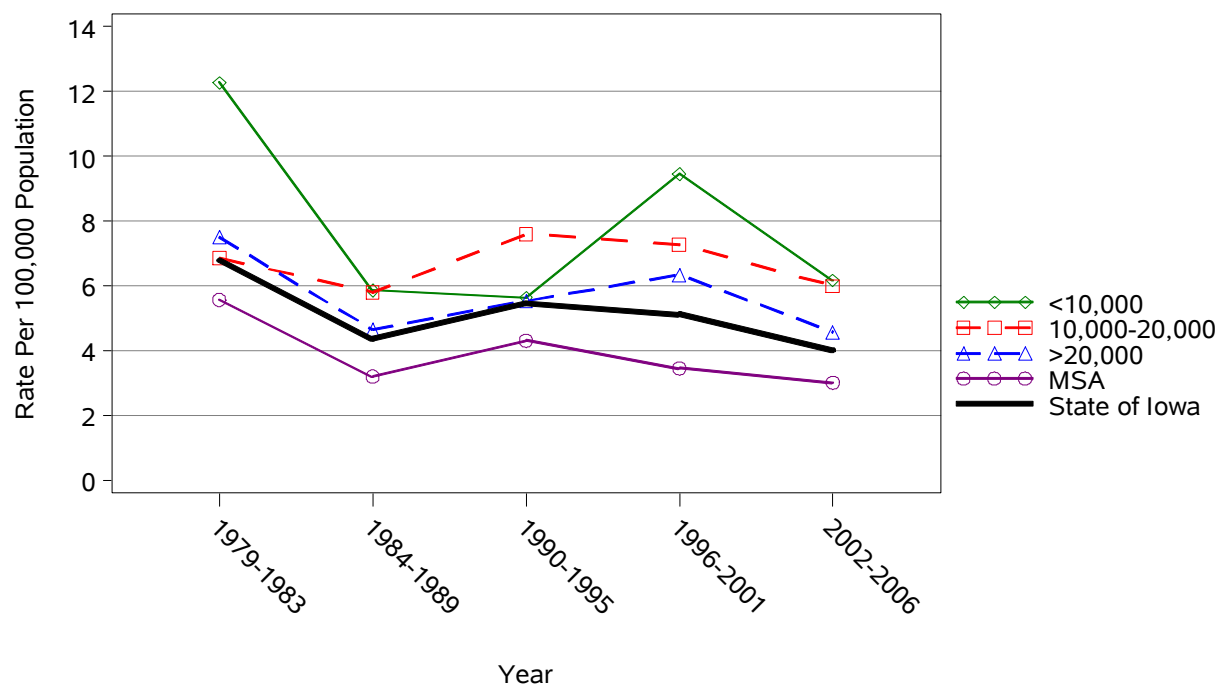
Age 15-19: Motor Vehicle Traffic Mortality 2002-2006

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Lucas	*	*
	Adams	*	*	Monona	*	*
	Audubon	*	*	Monroe	*	*
	Clarke	*	*	Osceola	*	*
	Davis	*	*	Palo Alto	*	*
	Decatur	*	*	Pocahontas	*	*
	Fremont	*	*	Ringgold	*	*
	Greene	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Humboldt	*	*	Wayne	*	*
	Ida	*	*	Worth	*	*
				Total	24	37.7
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Iowa	*	*
	Buena Vista	*	*	Jefferson	*	*
	Butler	*	*	Keokuk	*	*
	Calhoun	*	*	Kossuth	*	*
	Cass	*	*	Louisa	*	*
	Cedar	*	*	Lyon	*	*
	Cherokee	*	*	Mitchell	*	*
	Chickasaw	*	*	Montgomery	*	*
	Clay	*	*	O'Brien	*	*
	Clayton	*	*	Page	*	*
	Crawford	*	*	Poweshiek	5	62.0
	Delaware	*	*	Sac	*	*
	Dickinson	*	*	Shelby	*	*
	Emmet	*	*	Tama	*	*
	Floyd	*	*	Union	*	*
	Franklin	*	*	Winnebago	*	*
	Hamilton	*	*	Wright	*	*
	Hancock	*	*	Total	63	32.5
Counties with Average Population > 20,000	Boone	*	*	Lee	2	15.5
	Buchanan	*	*	Mahaska	1	12.4
	Carroll	6	75.0	Marion	5	38.3
	Cerro Gordo	5	31.5	Marshall	2	15.1
	Clinton	*	*	Muscatine	1	7.0
	Des Moines	*	*	Plymouth	1	10.5
	Fayette	*	*	Sioux	3	18.4
	Henry	*	*	Wapello	6	49.8
	Jackson	*	*	Webster	4	25.2
	Jasper	*	*	Winneshiek	1	9.4
				Total	48	20.7
MSA Counties	Benton	*	*	Linn	9	13.3
	Black Hawk	*	*	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	5	32.2	Polk	23	18.1
	Dubuque	5	14.3	Pottawattamie	*	*
	Grundy	*	*	Scott	10	17.5
	Guthrie	*	*	Story	*	*
	Harrison	*	*	Warren	8	48.0
	Johnson	9	16.1	Washington	*	*
	Jones	*	*	Woodbury	*	*
				Total	96	16.2
	State Total	231	21.3			

¹Rates per 100,000 PopulationSource: Iowa Department of Public Health via the State Health Registry of Iowa
* represents a count less than 5

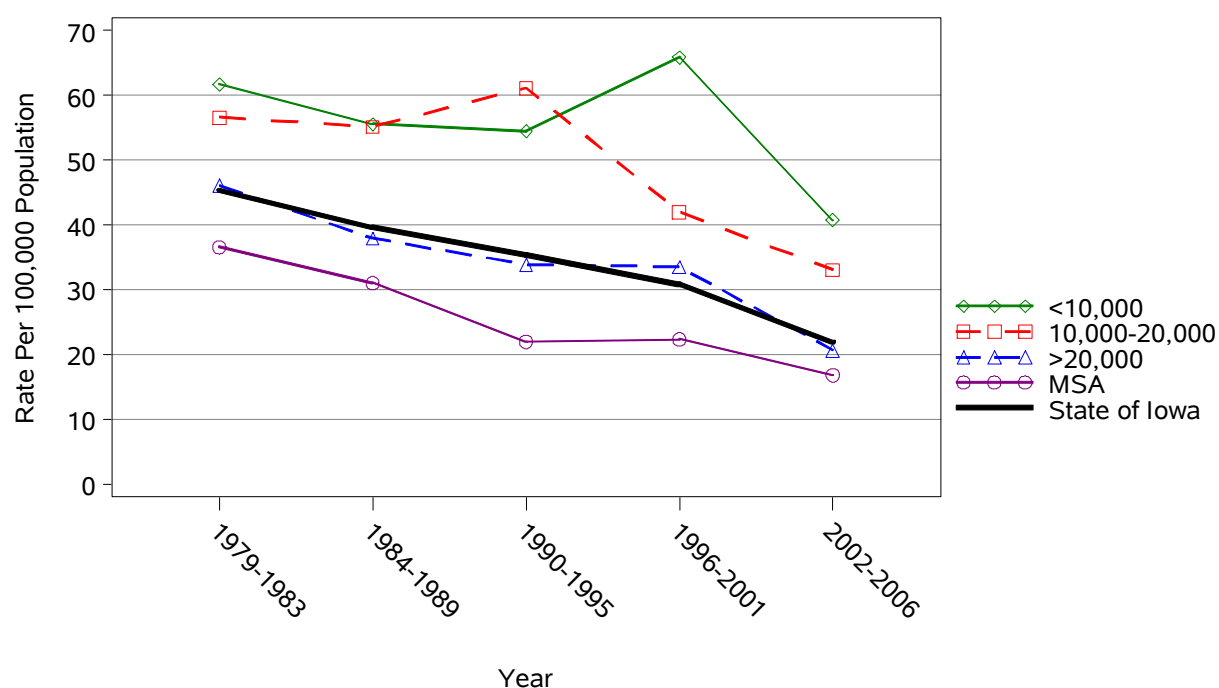
Age 0-14: Motor Vehicle Traffic Mortality by County Group 1979-2006

Crude Rates

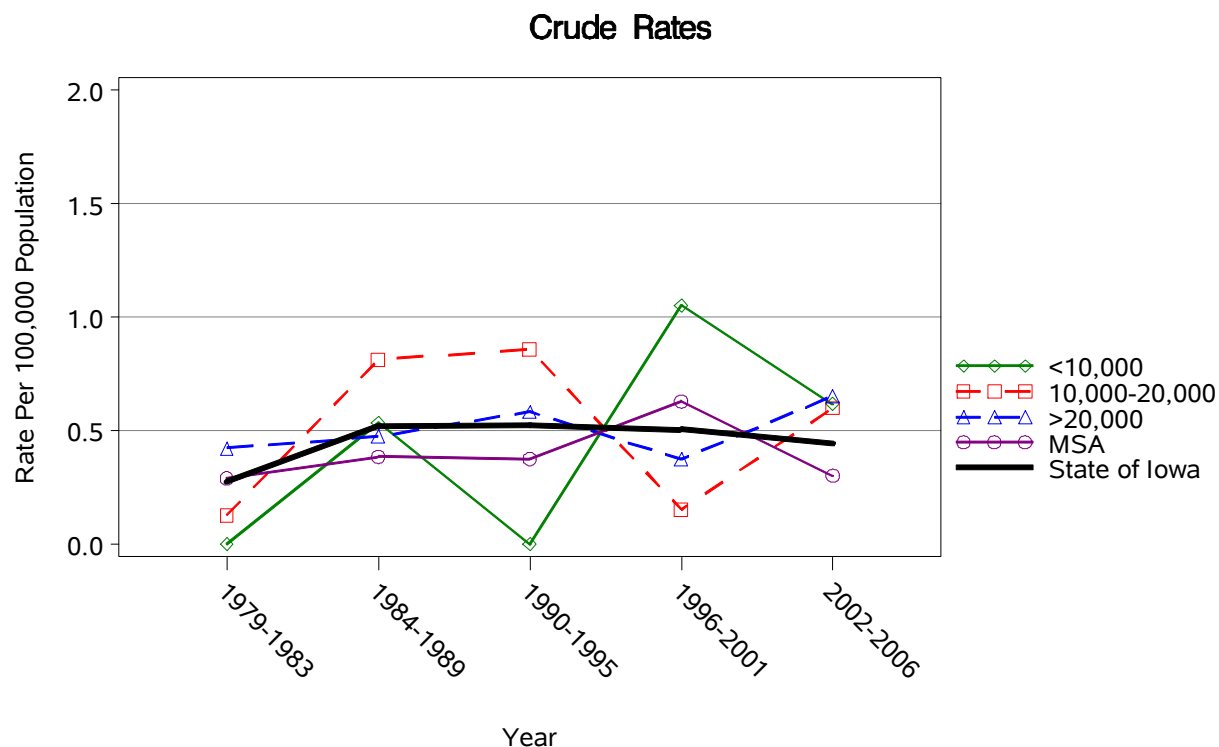


Age 15-19: Motor Vehicle Traffic Mortality by County Group 1979-2006

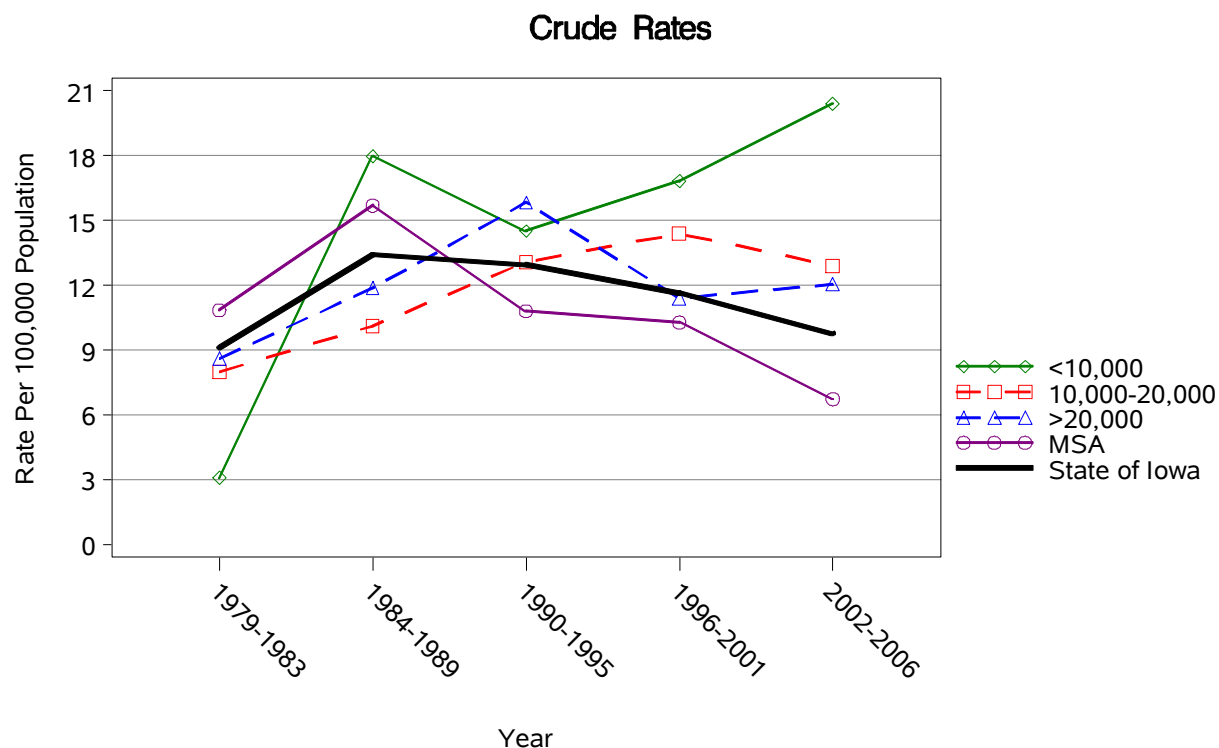
Crude Rates



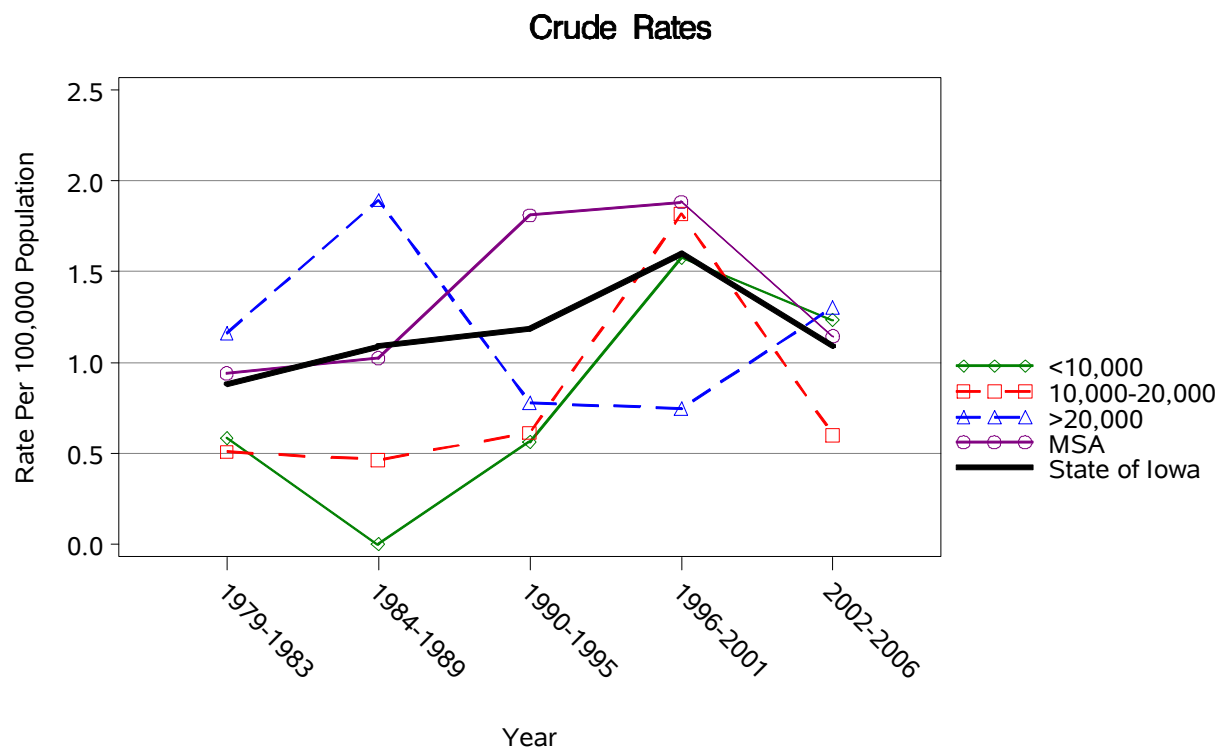
Age 0-14: Suicides by County Group 1979-2006



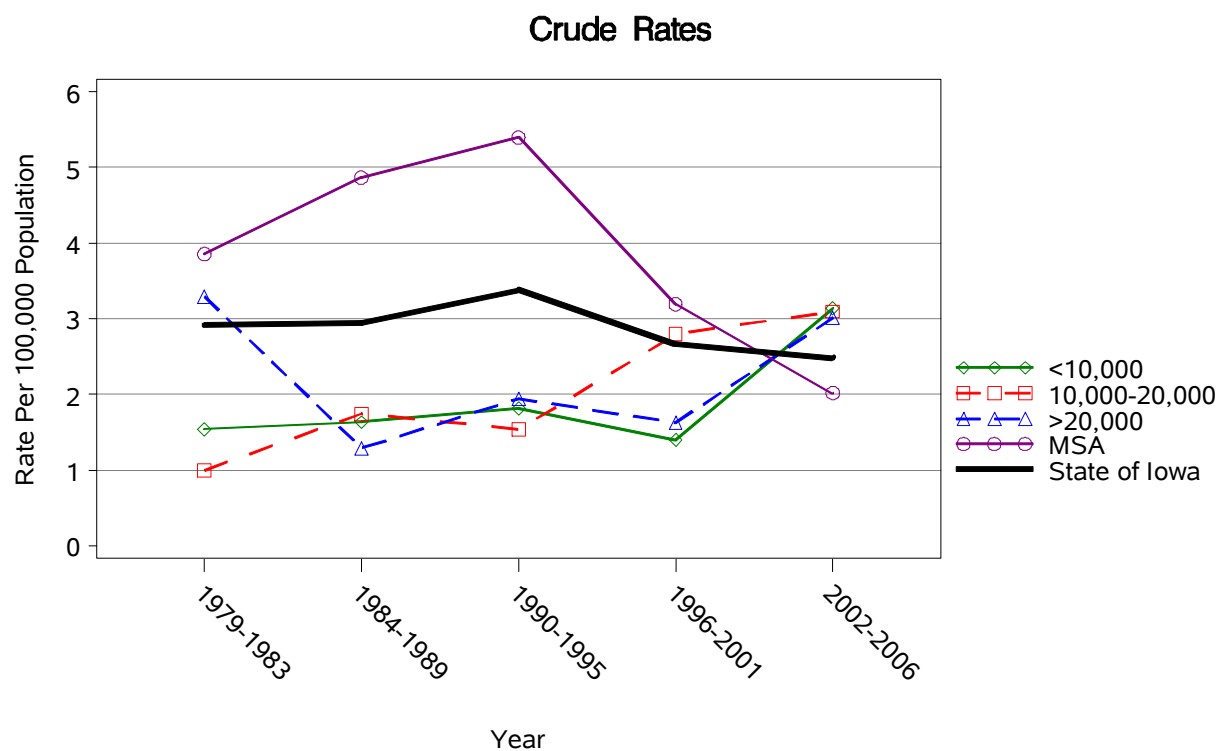
Age 15-19: Suicides by County Group 1979-2006



Age 0-14: Homicides by County Group 1979-2006



Age 15-19: Homicides by County Group 1979-2006



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Other Mortality

With the population aging, chronic disease has become a major determinant of the health of Iowans and the need for health care services in the state.

Heart disease, still the number one cause of death in Iowa, accounted for 257 deaths per 100,000 persons (crude rate) between 2002 and 2006. Using age-adjusted rates, the four county groupings (based on county size) do not vary much, and we do see a consistent decline over time. In the 1978 to 1983 period, the state age-adjusted mortality rate was 365 per 100,000, whereas it has dropped steadily to 198 per 100,000 by the 2002-2006 time period. This represents a 46% decline.

Stroke is currently the third leading cause of death in Iowa, with a crude mortality rate of 67 per 100,000 between 2002 and 2006. From 1978 through 1990, we experienced a steady decline in age-adjusted stroke mortality, but it declined only slightly between 1990-1995 and from 2002-2006 has resumed a more robust decline. The age-adjusted mortality rates for chronic obstructive pulmonary disease, currently the fourth leading cause of death, have been increasing across time with the

MAJOR CAUSES OF DEATH IN IOWA...

- ✓ Heart disease
- ✓ Cancer
- ✓ Stroke
- ✓ Chronic obstructive pulmonary disease
- ✓ Unintentional injuries (including MVC)
- ✓ Alzheimer's disease
- ✓ Diabetes
- ✓ Pneumonia/influenza
- ✓ Infectious/parasitic diseases
- ✓ Suicide

larger counties experiencing the highest rates. The fifth leading cause, unintentional injuries, includes motor vehicle collisions (MVC). Death from Alzheimer's, the sixth leading cause of death, has shown increasing crude and age-adjusted rates statewide since the 1978-1983 period. Crude rates are highest in the smaller counties, due to their larger proportion of elderly. The smaller counties are also exhibiting a greater problem with mortality due to diabetes, kidney diseases (nephritis, nephritic syndrome, and nephrosis), and pneumonia/influenza, based upon crude mortality rates, which when compared to the age-adjusted rates indicate this is primarily due to their larger proportion of elderly. Diabetes mortality has been increasing in all county groupings consistent with the obesity epidemic seen in Iowa.

These data were obtained from death certificates filed at the Iowa Department of Public Health via the National Center for Health Statistics and the SEER*Stat (version 6.5.1) software program provided by the National Cancer Institute.

All Causes Mortality 2002-2006

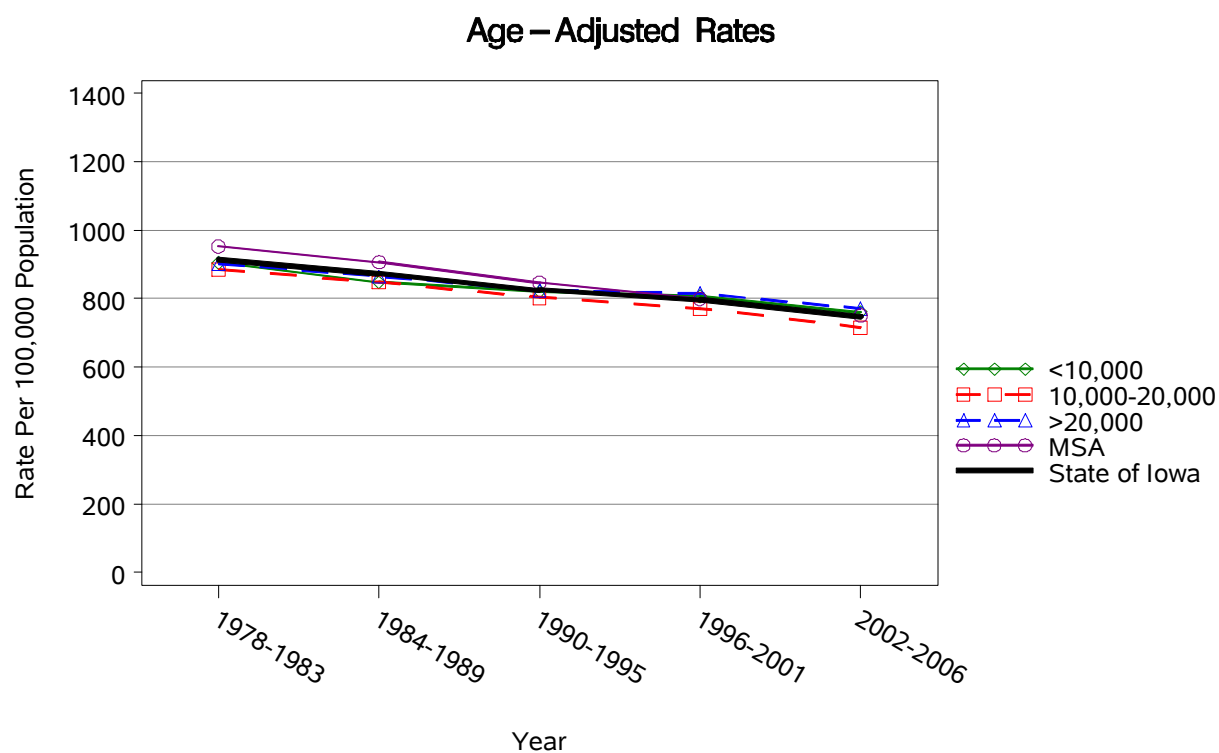
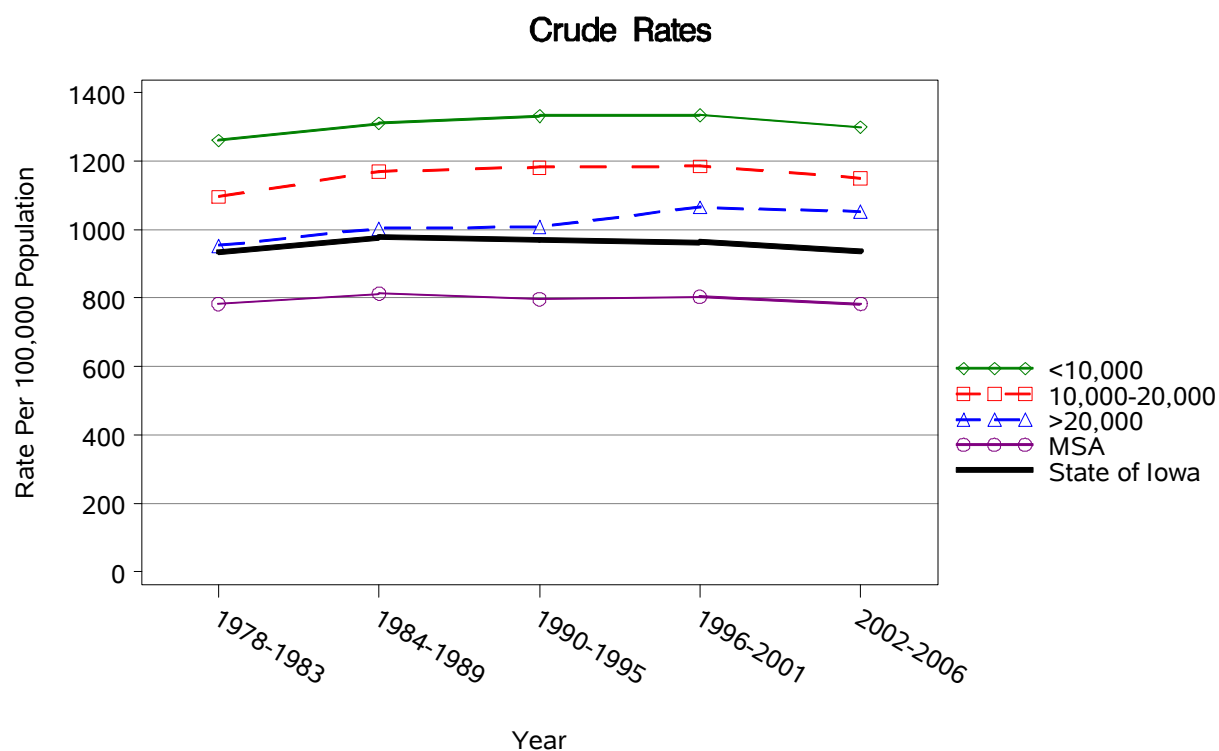
	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	578	1,475.8 (05)	769.0 (33)	Lucas	548	1,150.6 (46)	745.6 (46)
	Adams	269	1,265.6 (22)	750.1 (42)	Monona	814	1,714.6 (01)	859.1 (06)
	Audubon	452	1,421.7 (06)	710.4 (73)	Monroe	505	1,302.6 (15)	822.3 (14)
	Clarke	512	1,117.6 (52)	804.0 (20)	Osceola	411	1,220.4 (31)	789.0 (25)
	Davis	465	1,089.1 (58)	748.2 (45)	Palo Alto	628	1,300.8 (16)	735.6 (50)
	Decatur	453	1,068.1 (59)	726.1 (59)	Pocahontas	567	1,417.1 (07)	780.1 (28)
	Fremont	470	1,227.6 (30)	754.1 (39)	Ringgold	399	1,524.6 (03)	791.8 (22)
	Greene	602	1,216.7 (33)	657.5 (89)	Taylor	433	1,298.3 (19)	690.4 (81)
	Howard	589	1,216.5 (34)	717.8 (69)	Van Buren	478	1,244.9 (28)	815.9 (18)
	Humboldt	617	1,242.3 (29)	714.2 (71)	Wayne	497	1,526.2 (02)	822.9 (13)
	Ida	539	1,477.4 (04)	829.8 (11)	Worth	487	1,260.2 (23)	792.3 (21)
					Total	11,313	1,299.7	760.9
Counties with Average Population 10,000 – 20,000	Allamakee	812	1,122.8 (51)	728.1 (58)	Hardin	1,240	1,375.9 (09)	776.2 (30)
	Appanoose	913	1,367.6 (10)	839.0 (09)	Iowa	800	1,007.8 (70)	665.4 (87)
	Buena Vista	912	915.6 (84)	652.1 (91)	Jefferson	750	957.1 (73)	730.4 (54)
	Butler	947	1,282.5 (21)	756.0 (38)	Keokuk	659	1,190.3 (38)	724.5 (62)
	Calhoun	711	1,365.8 (11)	731.1 (53)	Kossuth	895	1,109.9 (53)	637.1 (94)
	Cass	912	1,295.7 (20)	726.0 (60)	Louisa	573	954.0 (76)	790.5 (24)
	Cedar	838	929.6 (80)	654.6 (90)	Lyon	611	1,061.3 (64)	688.6 (82)
	Cherokee	766	1,255.3 (25)	718.7 (66)	Mitchell	680	1,255.5 (24)	672.9 (85)
	Chickasaw	728	1,166.7 (43)	787.4 (27)	Montgomery	763	1,362.1 (12)	787.7 (26)
	Clay	902	1,067.8 (60)	695.2 (80)	O'Brien	938	1,300.4 (17)	695.3 (79)
	Clayton	1,017	1,128.9 (49)	735.6 (50)	Page	1,049	1,300.0 (18)	777.2 (29)
	Crawford	838	1,004.1 (71)	699.7 (78)	Poweshiek	1,118	1,192.3 (36)	770.8 (32)
	Delaware	779	874.7 (90)	658.9 (88)	Sac	755	1,404.4 (08)	729.2 (56)
	Dickinson	841	1,019.8 (67)	609.2 (97)	Shelby	744	1,180.4 (41)	681.6 (83)
	Emmet	631	1,192.1 (37)	730.3 (55)	Tama	992	1,108.0 (54)	715.8 (70)
	Floyd	1,002	1,218.2 (32)	729.2 (56)	Union	783	1,306.5 (14)	829.9 (10)
	Franklin	625	1,177.7 (42)	712.7 (72)	Winnebago	633	1,127.2 (50)	680.1 (84)
	Hamilton	854	1,065.2 (62)	710.3 (74)	Wright	884	1,307.0 (13)	718.0 (68)
	Hancock	622	1,064.7 (63)	666.5 (86)	Total	30,517	1,150.2	715.9
Counties with Average Population > 20,000	Boone	1,334	1,017.1 (69)	748.8 (44)	Lee	2,153	1,184.1 (40)	853.9 (07)
	Buchanan	991	952.6 (78)	763.8 (35)	Mahaska	1,047	944.2 (79)	718.5 (67)
	Carroll	1,153	1,099.9 (56)	649.3 (93)	Marion	1,651	1,018.6 (68)	748.9 (43)
	Cerro Gordo	2,604	1,164.2 (45)	804.1 (19)	Marshall	2,354	1,203.3 (35)	892.2 (01)
	Clinton	2,693	1,090.1 (57)	818.4 (15)	Muscatine	1,936	923.2 (81)	862.4 (05)
	Des Moines	2,182	1,065.8 (61)	751.7 (41)	Plymouth	1,235	1,004.0 (72)	757.8 (37)
	Fayette	1,231	1,166.7 (43)	720.7 (63)	Sioux	1,273	797.9 (93)	598.8 (98)
	Henry	1,029	1,024.3 (66)	763.0 (36)	Wapello	2,050	1,146.4 (47)	817.2 (16)
	Jackson	1,051	1,045.5 (65)	735.8 (49)	Webster	2,318	1,186.5 (39)	843.9 (08)
	Jasper	1,777	955.3 (75)	734.9 (52)	Winneshek	874	834.3 (91)	584.6 (99)
					Total	32,936	1,052.4	770.7
MSA Counties	Benton	1,183	897.0 (88)	702.7 (76)	Linn	7,571	761.7 (95)	720.2 (64)
	Black Hawk	5,575	880.1 (89)	740.1 (48)	Madison	678	921.3 (82)	744.5 (47)
	Bremer	1,059	905.4 (86)	627.4 (95)	Mills	670	906.8 (85)	866.1 (04)
	Dallas	1,598	647.9 (97)	773.2 (31)	Polk	14,197	714.7 (96)	752.8 (40)
	Dubuque	4,149	916.7 (83)	724.6 (61)	Pottawattamie	4,241	956.6 (74)	874.0 (03)
	Grundy	702	1,144.6 (48)	700.2 (77)	Scott	6,575	823.0 (92)	816.5 (17)
	Guthrie	703	1,249.7 (26)	790.6 (23)	Story	2,342	569.2 (98)	621.3 (96)
	Harrison	970	1,248.7 (27)	875.9 (02)	Warren	1,688	794.9 (94)	765.8 (34)
	Johnson	2,679	447.8 (99)	651.7 (92)	Washington	1,162	1,103.5 (55)	719.1 (65)
	Jones	967	953.3 (77)	710.3 (74)	Woodbury	4,634	904.9 (87)	829.5 (12)
					Total	63,343	783.2	751.1
State Total		138,109	936.9	747.4				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

All Causes Mortality by County Group 1978-2006



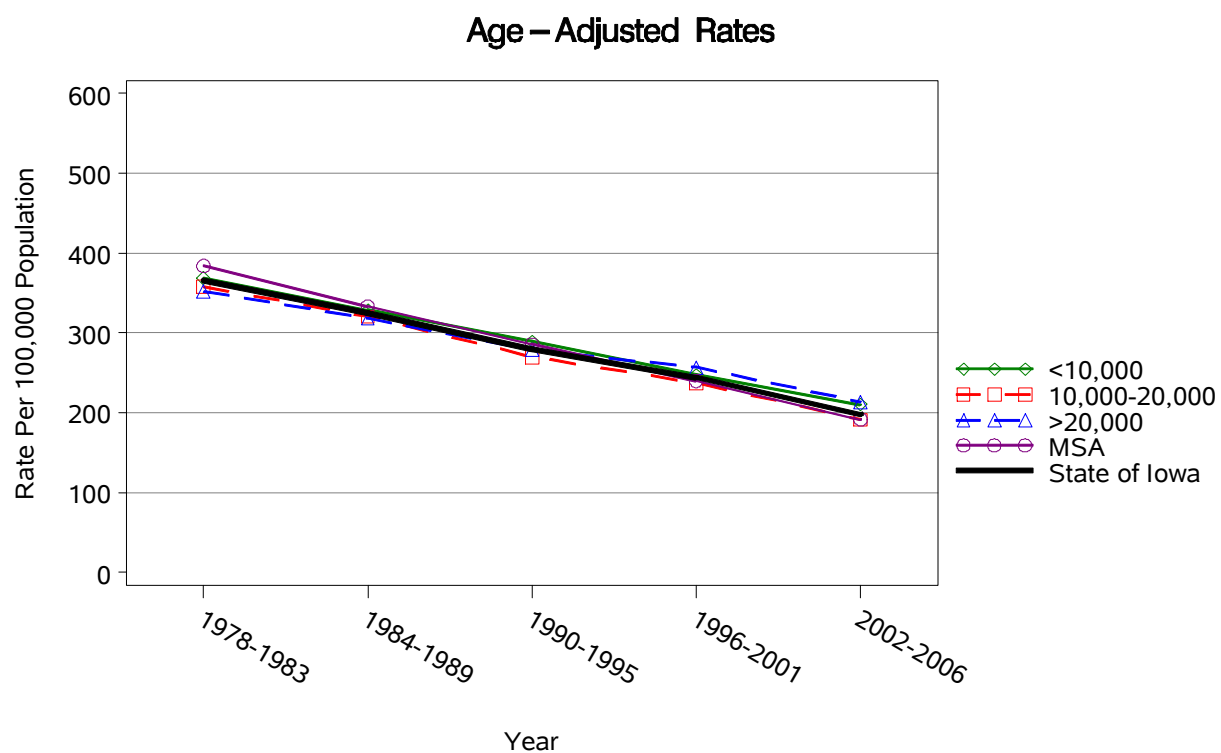
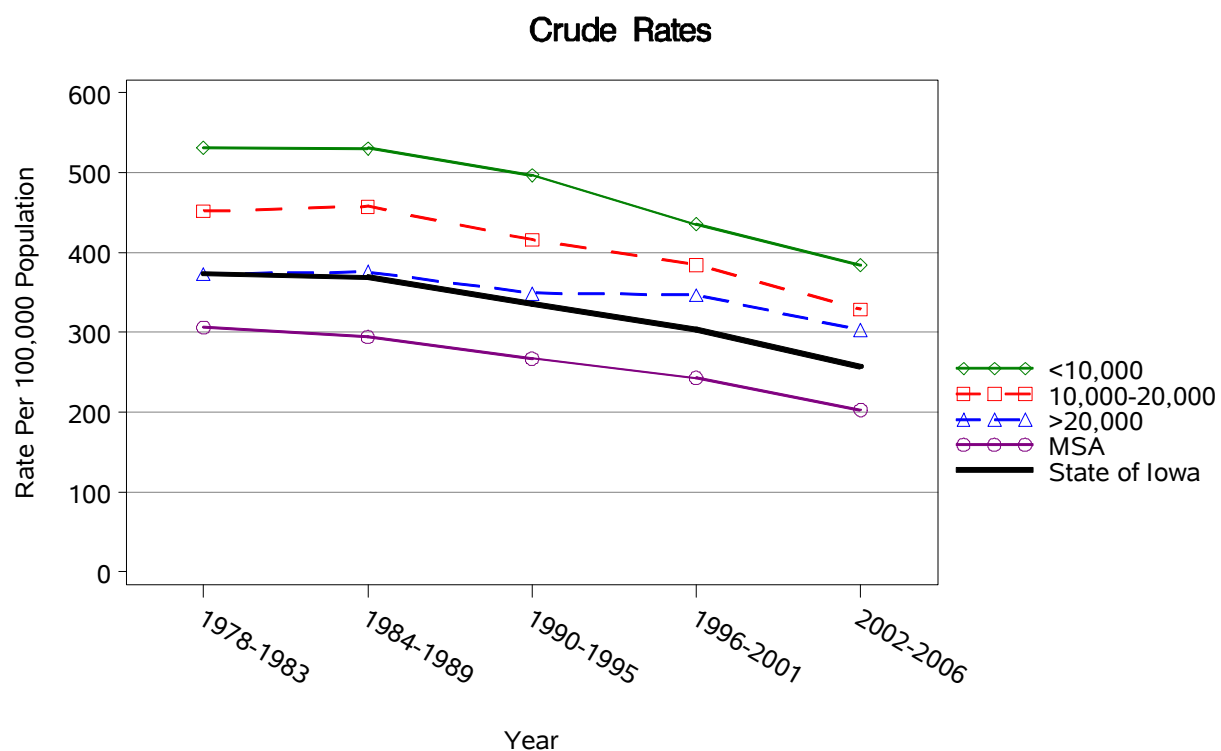
Heart Disease Mortality 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	168	428.9 (09)	204.9 (42)	Lucas	154	323.3 (44)	193.4 (54)
	Adams	81	381.1 (19)	205.9 (39)	Monona	243	511.8 (04)	232.1 (14)
	Audubon	100	314.5 (49)	149.2 (96)	Monroe	138	356.0 (24)	209.1 (34)
	Clarke	171	373.3 (21)	251.8 (07)	Osceola	174	516.7 (02)	296.9 (02)
	Davis	125	292.8 (67)	189.6 (60)	Palo Alto	140	290.0 (68)	146.5 (99)
	Decatur	133	313.6 (51)	209.9 (32)	Pocahontas	153	382.4 (18)	203.8 (43)
	Fremont	133	347.4 (29)	213.9 (25)	Ringgold	107	408.9 (13)	188.9 (63)
	Greene	208	420.4 (11)	215.5 (22)	Taylor	133	398.8 (14)	194.5 (52)
	Howard	177	365.6 (23)	203.1 (44)	Van Buren	119	309.9 (57)	194.8 (50)
	Humboldt	174	350.3 (28)	188.1 (66)	Wayne	161	494.4 (06)	250.6 (08)
	Ida	181	496.1 (05)	260.8 (06)	Worth	172	445.1 (08)	261.5 (05)
					Total	3,345	384.3	210.3
Counties with Average Population 10,000 – 20,000	Allamakee	186	257.2 (78)	158.1 (90)	Hardin	376	417.2 (12)	214.0 (24)
	Appanoose	441	660.6 (01)	373.2 (01)	Iowa	205	258.3 (77)	155.1 (91)
	Buena Vista	274	275.1 (72)	183.3 (73)	Jefferson	204	260.3 (75)	186.7 (68)
	Butler	289	391.4 (16)	216.8 (21)	Keokuk	174	314.3 (50)	175.9 (78)
	Calhoun	164	315.0 (48)	159.9 (88)	Kossuth	225	279.0 (70)	152.8 (94)
	Cass	244	346.6 (30)	183.7 (72)	Louisa	152	253.1 (82)	199.8 (46)
	Cedar	227	251.8 (84)	166.9 (83)	Lyon	195	338.7 (33)	205.2 (41)
	Cherokee	234	383.5 (17)	213.4 (26)	Mitchell	244	450.5 (07)	211.1 (29)
	Chickasaw	230	368.6 (22)	233.6 (13)	Montgomery	190	339.2 (32)	187.4 (67)
	Clay	219	259.3 (76)	158.3 (89)	O'Brien	253	350.7 (27)	175.0 (79)
	Clayton	268	297.5 (63)	178.0 (76)	Page	272	337.1 (34)	193.7 (53)
	Crawford	214	256.4 (79)	174.0 (81)	Poweshiek	322	343.4 (31)	207.1 (37)
	Delaware	200	224.6 (90)	163.1 (85)	Sac	228	424.1 (10)	201.2 (45)
	Dickinson	253	306.8 (58)	171.4 (82)	Shelby	180	285.6 (69)	148.6 (98)
	Emmet	177	334.4 (35)	188.8 (64)	Tama	278	310.5 (56)	190.1 (58)
	Floyd	289	351.4 (26)	197.9 (48)	Union	308	513.9 (03)	296.7 (03)
	Franklin	177	333.5 (38)	190.0 (59)	Winnebago	180	320.5 (46)	177.7 (77)
	Hamilton	268	334.3 (36)	209.0 (35)	Wright	201	297.2 (64)	154.2 (92)
	Hancock	179	306.4 (59)	178.2 (75)	Total	8,720	328.7	191.2
Counties with Average Population > 20,000	Boone	397	302.7 (60)	210.3 (30)	Lee	641	352.5 (25)	246.6 (10)
	Buchanan	262	251.8 (84)	195.4 (49)	Mahaska	330	297.6 (61)	214.7 (23)
	Carroll	349	332.9 (40)	188.8 (64)	Marion	433	267.1 (73)	189.6 (60)
	Cerro Gordo	705	315.2 (47)	210.3 (30)	Marshall	611	312.3 (54)	225.8 (18)
	Clinton	980	396.7 (15)	281.0 (04)	Muscatine	451	215.1 (91)	198.8 (47)
	Des Moines	661	322.9 (45)	220.5 (20)	Plymouth	366	297.6 (61)	212.7 (27)
	Fayette	330	312.8 (53)	184.6 (71)	Sioux	370	231.9 (88)	166.8 (84)
	Henry	295	293.6 (65)	208.4 (36)	Wapello	583	326.0 (43)	227.9 (17)
	Jackson	330	328.3 (41)	221.5 (19)	Webster	651	333.2 (39)	228.4 (16)
	Jasper	485	260.7 (74)	193.3 (55)	Winneshek	239	228.1 (89)	153.1 (93)
					Total	9,469	302.6	213.3
MSA Counties	Benton	440	333.6 (37)	247.5 (09)	Linn	1,720	173.0 (97)	160.2 (87)
	Black Hawk	1,493	235.7 (86)	191.3 (57)	Madison	139	188.9 (92)	148.8 (97)
	Bremer	364	311.2 (55)	205.4 (40)	Mills	187	253.1 (82)	235.9 (12)
	Dallas	430	174.3 (96)	206.7 (38)	Polk	3,674	184.9 (94)	194.7 (51)
	Dubuque	1,250	276.2 (71)	212.6 (28)	Pottawattamie	1,131	255.1 (80)	230.8 (15)
	Grundy	201	327.7 (42)	189.6 (60)	Scott	1,506	188.5 (93)	186.3 (69)
	Guthrie	165	293.3 (66)	184.9 (70)	Story	621	150.9 (98)	160.5 (86)
	Harrison	291	374.6 (20)	242.2 (11)	Warren	392	184.6 (95)	174.8 (80)
	Johnson	611	102.1 (99)	150.8 (95)	Washington	330	313.4 (52)	192.4 (56)
	Jones	258	254.3 (81)	179.6 (74)	Woodbury	1,192	232.8 (87)	209.4 (33)
					Total	16,395	202.7	191.7
State Total		37,929	257.3	198.3				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Heart Disease Mortality by County Group 1978-2006



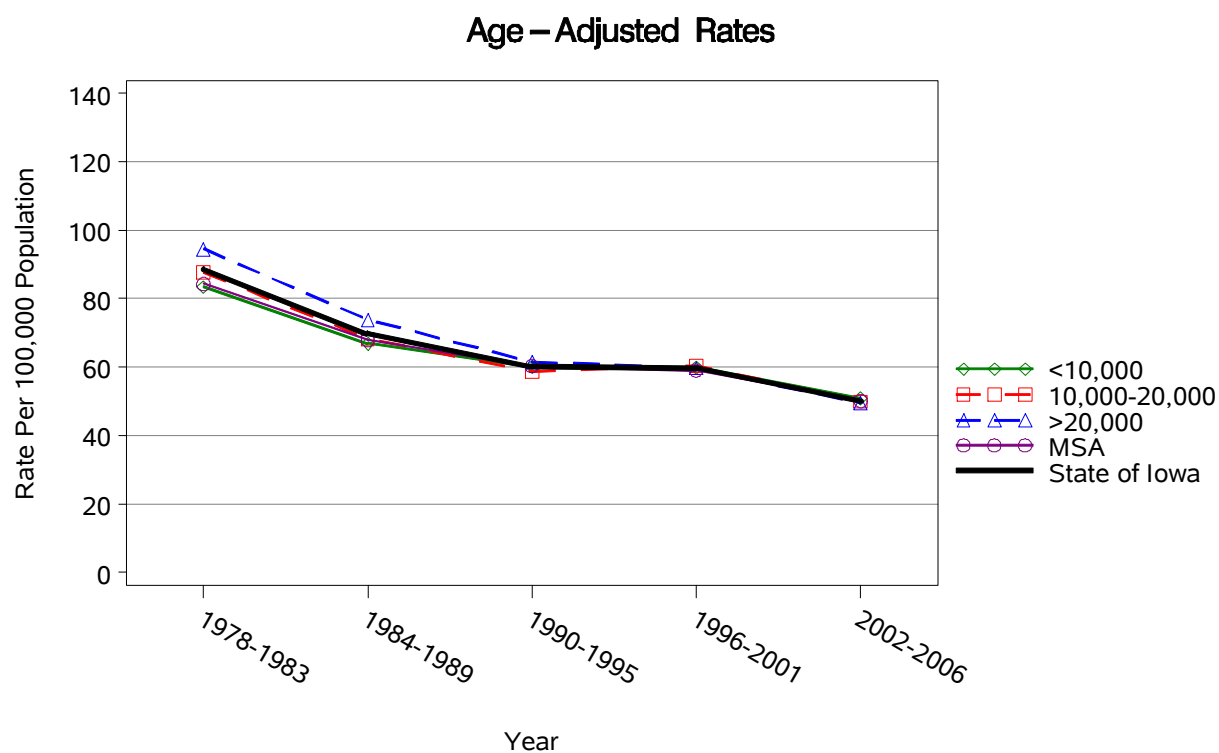
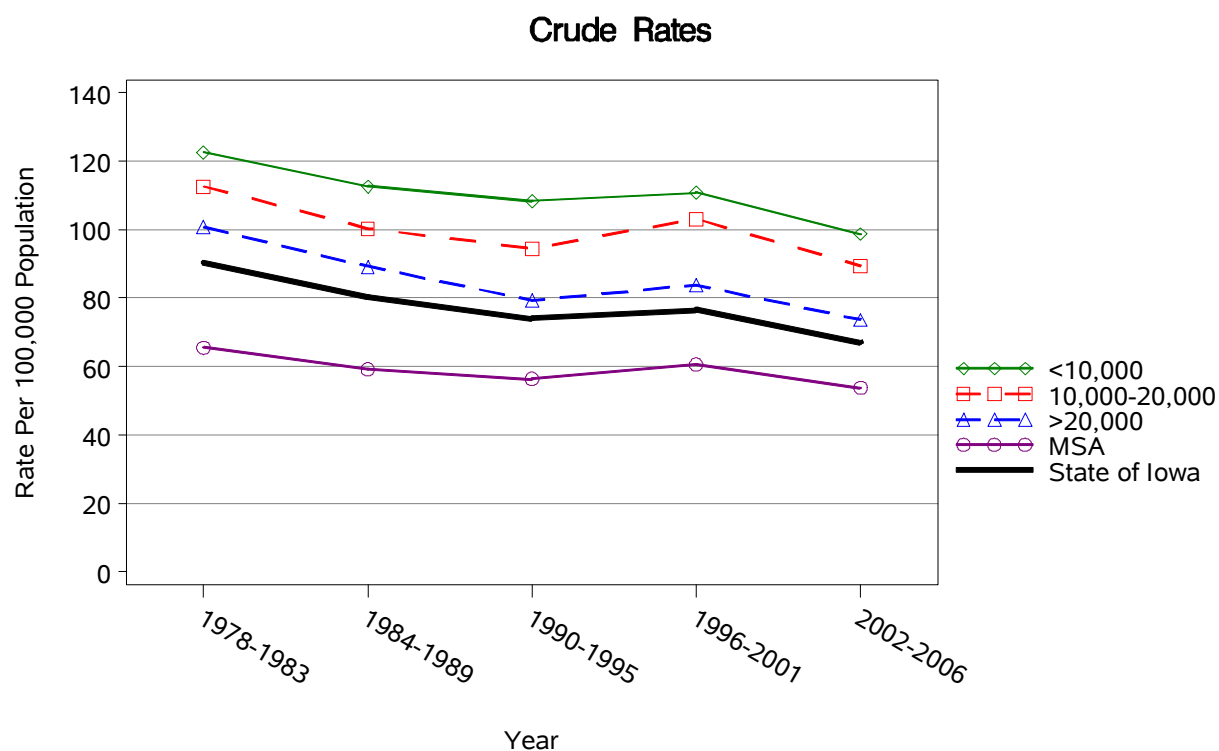
Stroke Mortality 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	55	140.4 (04)	58.8 (19)	Lucas	42	88.2 (32)	55.7 (26)
	Adams	11	51.8 (91)	29.4 (98)	Monona	43	90.6 (29)	37.8 (90)
	Audubon	39	122.7 (10)	56.6 (25)	Monroe	46	118.7 (13)	66.4 (11)
	Clarke	29	63.3 (77)	40.6 (81)	Osceola	29	86.1 (37)	51.3 (34)
	Davis	57	133.5 (07)	83.1 (01)	Palo Alto	49	101.5 (22)	46.9 (51)
	Decatur	30	70.7 (63)	46.5 (52)	Pocahontas	61	152.5 (02)	70.5 (06)
	Fremont	33	86.2 (36)	44.1 (64)	Ringgold	21	80.2 (49)	38.8 (88)
	Greene	48	97.0 (23)	41.3 (78)	Taylor	29	87.0 (33)	41.2 (79)
	Howard	32	66.1 (70)	35.6 (94)	Van Buren	35	91.2 (28)	53.2 (30)
	Humboldt	43	86.6 (35)	41.8 (77)	Wayne	52	159.7 (01)	69.6 (07)
	Ida	35	95.9 (24)	51.5 (33)	Worth	40	103.5 (19)	58.1 (21)
					Total	859	98.7	50.8
Counties with Average Population 10,000 – 20,000	Allamakee	80	110.6 (18)	68.4 (09)	Hardin	113	125.4 (09)	61.3 (14)
	Appanoose	56	83.9 (42)	46.5 (52)	Iowa	61	76.8 (52)	44.0 (65)
	Buena Vista	64	64.3 (74)	42.0 (76)	Jefferson	88	112.3 (16)	81.2 (03)
	Butler	85	115.1 (14)	61.3 (14)	Keokuk	39	70.4 (64)	43.6 (71)
	Calhoun	72	138.3 (05)	64.1 (13)	Kossuth	66	81.8 (46)	46.4 (54)
	Cass	78	110.8 (17)	54.9 (27)	Louisa	42	69.9 (65)	54.2 (28)
	Cedar	102	113.1 (15)	68.7 (08)	Lyon	47	81.6 (47)	49.8 (38)
	Cherokee	53	86.9 (34)	44.2 (63)	Mitchell	56	103.4 (20)	49.5 (40)
	Chickasaw	37	59.3 (83)	37.6 (91)	Montgomery	84	150.0 (03)	68.4 (09)
	Clay	70	82.9 (44)	47.6 (47)	O'Brien	66	91.5 (27)	40.3 (83)
	Clayton	80	88.8 (30)	53.6 (29)	Page	69	85.5 (38)	45.7 (55)
	Crawford	46	55.1 (86)	35.5 (95)	Poweshiek	115	122.6 (11)	71.8 (05)
	Delaware	51	57.3 (85)	39.5 (86)	Sac	72	133.9 (06)	56.9 (23)
	Dickinson	62	75.2 (55)	39.6 (84)	Shelby	56	88.8 (30)	47.7 (46)
	Emmet	37	69.9 (65)	35.3 (96)	Tama	58	64.8 (73)	36.3 (93)
	Floyd	70	85.1 (39)	47.0 (49)	Union	51	85.1 (39)	50.0 (37)
	Franklin	43	81.0 (48)	47.0 (49)	Winnebago	40	71.2 (62)	37.2 (92)
	Hamilton	44	54.9 (87)	33.3 (97)	Wright	69	102.0 (21)	45.0 (57)
	Hancock	48	82.2 (45)	47.4 (48)	Total	2,370	89.3	49.9
Counties with Average Population > 20,000	Boone	90	68.6 (68)	47.8 (45)	Lee	137	75.3 (54)	50.2 (36)
	Buchanan	57	54.8 (88)	40.9 (80)	Mahaska	71	64.0 (75)	43.9 (67)
	Carroll	83	79.2 (50)	39.6 (84)	Marion	108	66.6 (69)	44.6 (60)
	Cerro Gordo	268	119.8 (12)	76.2 (04)	Marshall	121	61.8 (81)	44.3 (61)
	Clinton	153	61.9 (80)	43.9 (67)	Muscatine	152	72.5 (61)	66.3 (12)
	Des Moines	157	76.7 (53)	48.7 (42)	Plymouth	78	63.4 (76)	43.7 (70)
	Fayette	78	73.9 (60)	40.6 (81)	Sioux	69	43.2 (96)	28.9 (99)
	Henry	127	126.4 (08)	82.9 (02)	Wapello	151	84.4 (41)	52.7 (31)
	Jackson	66	65.7 (71)	42.3 (75)	Webster	135	69.1 (67)	44.3 (61)
	Jasper	115	61.8 (81)	45.3 (56)	Winneshek	87	83.0 (43)	52.5 (32)
					Total	2,303	73.6	49.4
MSA Counties	Benton	66	50.0 (92)	38.9 (87)	Linn	462	46.5 (94)	42.5 (74)
	Black Hawk	471	74.4 (58)	57.8 (22)	Madison	40	54.4 (90)	42.7 (73)
	Bremer	87	74.4 (58)	49.7 (39)	Mills	35	47.4 (93)	44.7 (59)
	Dallas	92	37.3 (97)	44.9 (58)	Polk	915	46.1 (95)	48.5 (44)
	Dubuque	350	77.3 (51)	56.9 (23)	Pottawattamie	289	65.2 (72)	59.0 (18)
	Grundy	57	92.9 (26)	50.5 (35)	Scott	472	59.1 (84)	58.5 (20)
	Guthrie	42	74.7 (57)	43.6 (71)	Story	152	36.9 (98)	38.3 (89)
	Harrison	73	94.0 (25)	61.0 (16)	Warren	134	63.1 (78)	59.9 (17)
	Johnson	197	32.9 (99)	49.2 (41)	Washington	79	75.0 (56)	44.0 (65)
	Jones	63	62.1 (79)	43.8 (69)	Woodbury	279	54.5 (89)	48.6 (43)
					Total	4,355	53.8	50.1
State Total		9,887	67.1	50				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Stroke Mortality by County Group 1978-2006



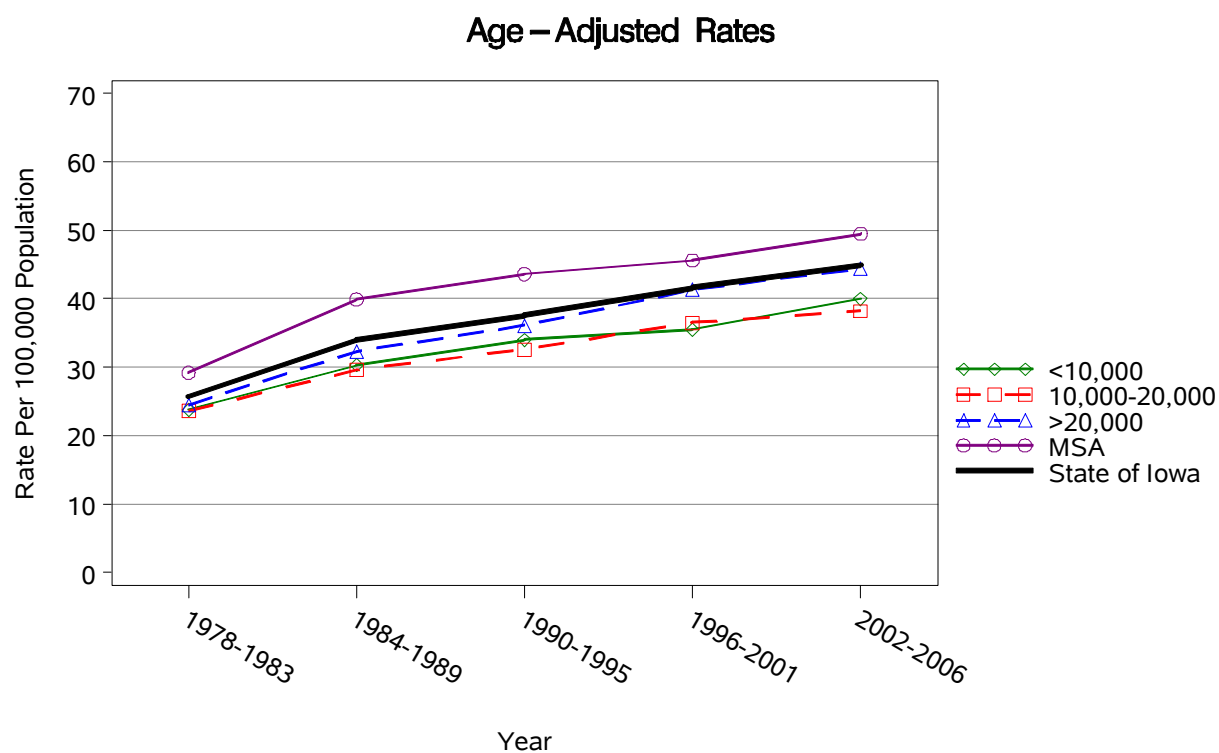
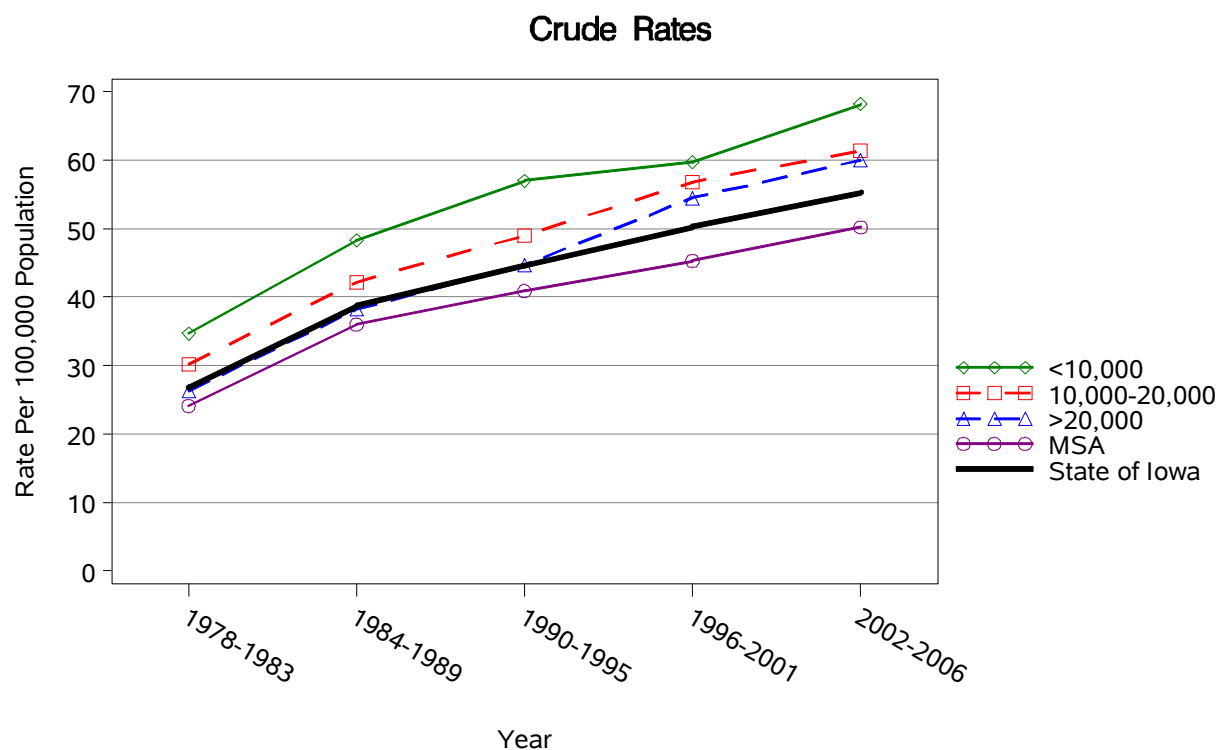
Chronic Obstructive Pulmonary Disease Mortality 2002-2006

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	20	51.1 (73)	29.3 (84)	Lucas	27	56.7 (51)	39.8 (52)
	Adams	7	32.9 (96)	19.3 (99)	Monona	53	111.6 (01)	58.7 (09)
	Audubon	28	88.1 (10)	44.0 (36)	Monroe	40	103.2 (03)	65.1 (04)
	Clarke	23	50.2 (74)	38.5 (59)	Osceola	12	35.6 (94)	21.9 (98)
	Davis	25	58.6 (46)	36.7 (68)	Palo Alto	41	84.9 (14)	49.5 (21)
	Decatur	26	61.3 (39)	42.3 (42)	Pocahontas	28	70.0 (27)	35.0 (72)
	Fremont	27	70.5 (26)	42.1 (43)	Ringgold	24	91.7 (06)	45.2 (33)
	Greene	24	48.5 (79)	23.8 (96)	Taylor	26	78.0 (18)	42.0 (45)
	Howard	24	49.6 (78)	28.0 (87)	Van Buren	24	62.5 (37)	40.9 (47)
	Humboldt	45	90.6 (07)	50.3 (18)	Wayne	29	89.1 (08)	48.2 (23)
	Ida	26	71.3 (24)	36.8 (66)	Worth	15	38.8 (89)	26.7 (89)
					Total	594	68.2	40
Counties with Average Population 10,000 – 20,000	Allamakee	39	53.9 (60)	36.3 (69)	Hardin	55	61.0 (41)	35.6 (70)
	Appanoose	27	40.4 (87)	24.2 (94)	Iowa	29	36.5 (91)	24.5 (92)
	Buena Vista	55	55.2 (54)	38.0 (63)	Jefferson	28	35.7 (93)	30.3 (82)
	Butler	39	52.8 (63)	30.8 (81)	Keokuk	46	83.1 (17)	49.7 (20)
	Calhoun	46	88.4 (09)	42.7 (41)	Kossuth	37	45.9 (82)	25.7 (90)
	Cass	62	88.1 (10)	52.0 (14)	Louisa	27	45.0 (84)	38.2 (62)
	Cedar	49	54.4 (58)	38.5 (59)	Lyon	30	52.1 (67)	33.6 (75)
	Cherokee	47	77.0 (20)	43.7 (39)	Mitchell	23	42.5 (86)	22.9 (97)
	Chickasaw	42	67.3 (30)	44.6 (34)	Montgomery	58	103.5 (02)	59.5 (07)
	Clay	48	56.8 (50)	36.8 (66)	O'Brien	48	66.5 (33)	34.6 (73)
	Clayton	55	61.1 (40)	39.1 (58)	Page	55	68.2 (29)	39.4 (55)
	Crawford	48	57.5 (49)	37.9 (64)	Poweshiek	79	84.3 (15)	57.1 (11)
	Delaware	52	58.4 (47)	45.4 (31)	Sac	41	76.3 (21)	38.4 (61)
	Dickinson	41	49.7 (76)	28.7 (85)	Shelby	41	65.0 (35)	40.7 (49)
	Emmet	24	45.3 (83)	28.0 (87)	Tama	60	67.0 (31)	44.0 (36)
	Floyd	70	85.1 (12)	50.2 (19)	Union	40	66.7 (32)	44.3 (35)
	Franklin	28	52.8 (63)	30.0 (83)	Winnebago	27	48.1 (80)	32.1 (78)
	Hamilton	44	54.9 (56)	35.4 (71)	Wright	57	84.3 (15)	47.1 (27)
	Hancock	31	53.1 (62)	34.1 (74)	Total	1,628	61.4	38.2
Counties with Average Population > 20,000	Boone	69	52.6 (66)	39.3 (57)	Lee	116	63.8 (36)	47.3 (26)
	Buchanan	56	53.8 (61)	43.9 (38)	Mahaska	57	51.4 (71)	39.5 (53)
	Carroll	63	60.1 (43)	33.5 (76)	Marion	88	54.3 (59)	42.1 (43)
	Cerro Gordo	159	71.1 (25)	47.9 (24)	Marshall	191	97.6 (05)	73.0 (01)
	Clinton	123	49.8 (75)	37.3 (65)	Muscatine	109	52.0 (68)	50.6 (17)
	Des Moines	114	55.7 (52)	40.6 (50)	Plymouth	49	39.8 (88)	31.2 (79)
	Fayette	54	51.2 (72)	32.5 (77)	Sioux	50	31.3 (97)	24.4 (93)
	Henry	52	51.8 (69)	39.5 (53)	Wapello	117	65.4 (34)	46.3 (30)
	Jackson	78	77.6 (19)	52.1 (13)	Webster	197	100.8 (04)	72.5 (02)
	Jasper	98	52.7 (65)	40.3 (51)	Winnesiek	37	35.3 (95)	25.0 (91)
					Total	1,877	60	44.4
MSA Counties	Benton	77	58.4 (47)	47.5 (25)	Linn	546	54.9 (56)	53.5 (12)
	Black Hawk	353	55.7 (52)	47.0 (28)	Madison	44	59.8 (44)	50.8 (16)
	Bremer	43	36.8 (90)	24.2 (94)	Mills	45	60.9 (42)	60.5 (05)
	Dallas	89	36.1 (92)	45.4 (31)	Polk	878	44.2 (85)	48.3 (22)
	Dubuque	225	49.7 (76)	39.4 (55)	Pottawattamie	322	72.6 (23)	66.4 (03)
	Grundy	29	47.3 (81)	28.6 (86)	Scott	477	59.7 (45)	60.2 (06)
	Guthrie	39	69.3 (28)	43.5 (40)	Story	110	26.7 (98)	30.9 (80)
	Harrison	66	85.0 (13)	59.2 (08)	Warren	110	51.8 (69)	51.9 (15)
	Johnson	156	26.1 (99)	41.1 (46)	Washington	77	73.1 (22)	46.7 (29)
	Jones	56	55.2 (54)	40.8 (48)	Woodbury	318	62.1 (38)	58.3 (10)
					Total	4,060	50.2	49.5
State Total		8,159	55.3	44.9				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Chronic Obstructive Pulmonary Disease Mortality by County Group 1978-2006



Pneumonia/Influenza Mortality 2002-2006

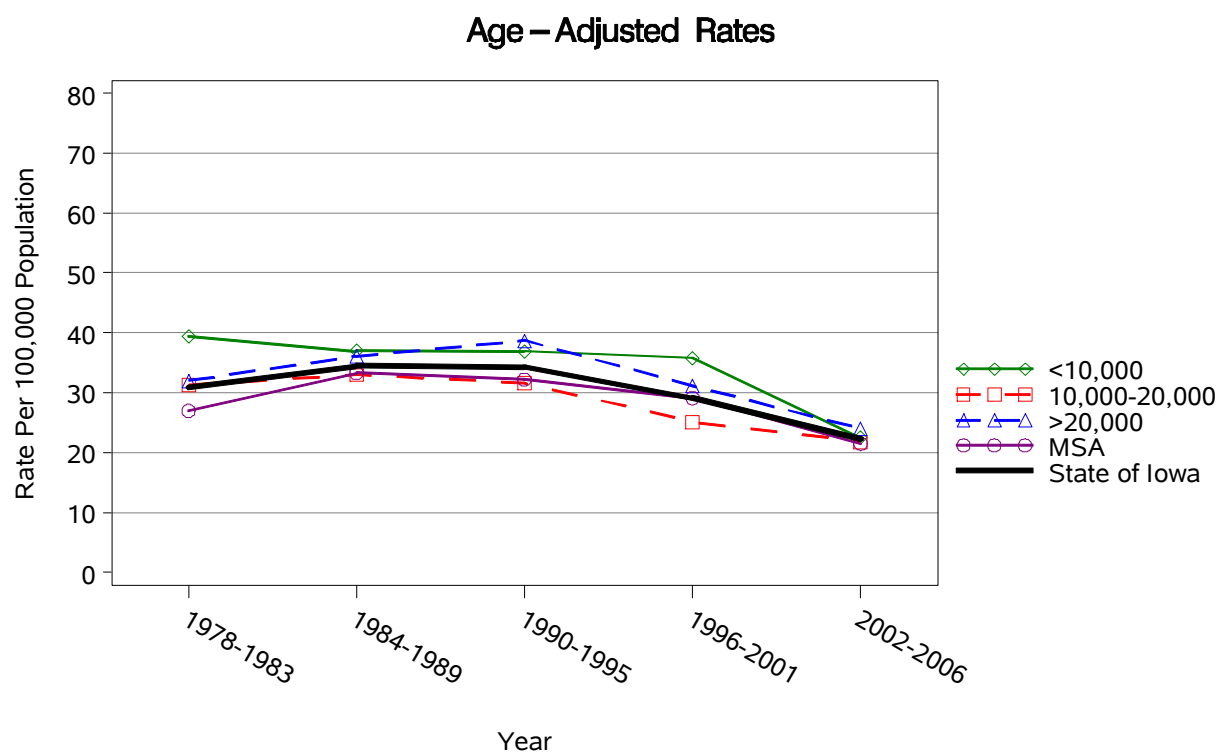
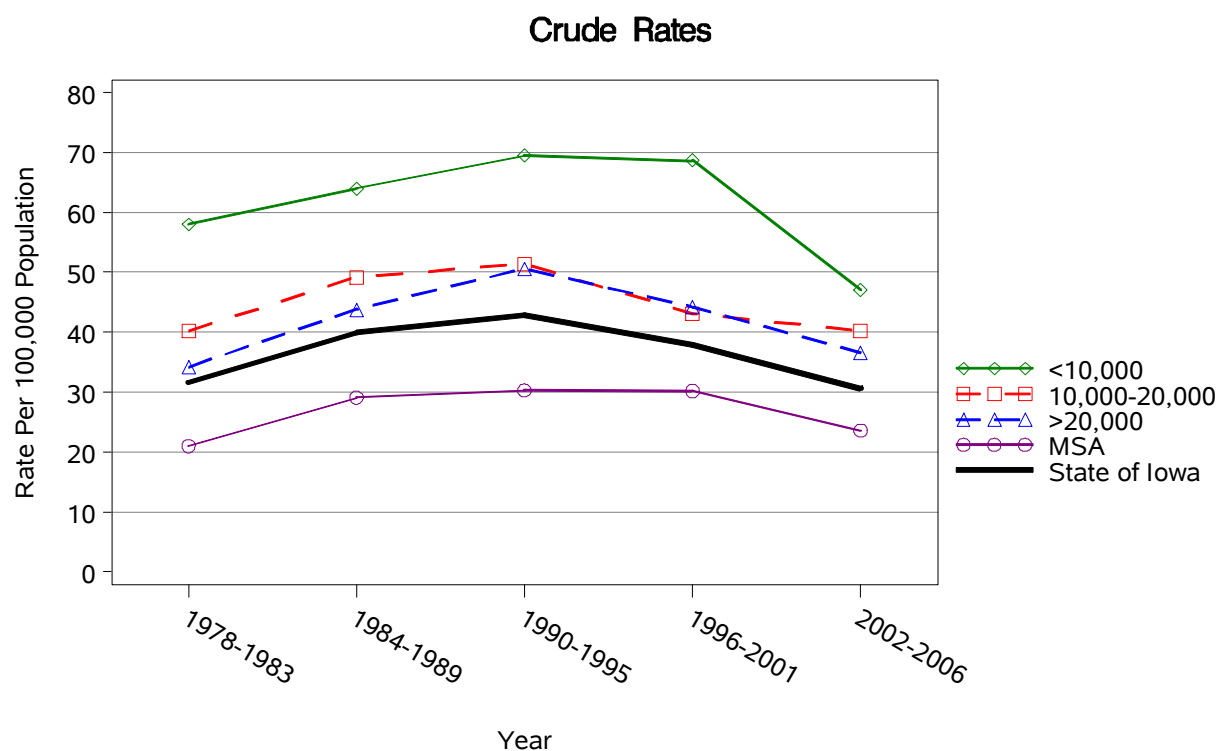
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	46	117.4	48.2	Lucas	35	73.5	36.7
	Adams	*	*	*	Monona	39	82.1	32.4
	Audubon	14	44	18.1	Monroe	18	46.4	24.8
	Clarke	16	34.9	19.4	Osceola	*	*	*
	Davis	30	70.3	38.6	Palo Alto	12	24.9	10.2
	Decatur	18	42.4	27.2	Pocahontas	27	67.5	29
	Fremont	21	54.9	28.9	Ringgold	12	45.9	24.3
	Greene	10	20.2	9.4	Taylor	12	36	16.1
	Howard	21	43.4	21.1	Van Buren	10	26	15.9
	Humboldt	17	34.2	15.6	Wayne	17	52.2	20.6
	Ida	14	38.4	16.1	Worth	13	33.6	17.1
					Total	410	47.1	22.5
Counties with Average Population 10,000 – 20,000	Allamakee	18	24.9	15.5	Hardin	31	34.4	15.9
	Appanoose	25	37.4	22	Iowa	33	41.6	21.8
	Buena Vista	32	32.1	19.1	Jefferson	35	44.7	33.1
	Butler	28	37.9	19.3	Keokuk	18	32.5	17.2
	Calhoun	26	49.9	22.2	Kossuth	29	36	17.9
	Cass	44	62.5	28.7	Louisa	19	31.6	24.6
	Cedar	29	32.2	20	Lyon	19	33	17
	Cherokee	21	34.4	17.4	Mitchell	34	62.8	30
	Chickasaw	13	20.8	12.5	Montgomery	25	44.6	23.3
	Clay	26	30.8	17.9	O'Brien	47	65.2	28.9
	Clayton	40	44.4	25.4	Page	65	80.6	43.1
	Crawford	11	13.2	7.7	Poweshiek	39	41.6	22.2
	Delaware	22	24.7	17.7	Sac	34	63.2	27.4
	Dickinson	20	24.3	11.9	Shelby	38	60.3	30
	Emmet	17	32.1	15.9	Tama	27	30.2	14.7
	Floyd	22	26.7	15.7	Union	17	28.4	17.1
	Franklin	26	49	26.4	Winnebago	21	37.4	21.2
	Hamilton	34	42.4	25.6	Wright	55	81.3	38.2
	Hancock	27	46.2	24.7	Total	1,067	40.2	21.8
Counties with Average Population > 20,000	Boone	60	45.7	28.8	Lee	97	53.3	33.5
	Buchanan	24	23.1	17.5	Mahaska	32	28.9	19.5
	Carroll	38	36.3	19.9	Marion	63	38.9	25.5
	Cerro Gordo	71	31.7	20.4	Marshall	60	30.7	21.1
	Clinton	51	20.6	14.3	Muscatine	70	33.4	30.5
	Des Moines	72	35.2	22.9	Plymouth	26	21.1	14.6
	Fayette	82	77.7	39.8	Sioux	45	28.2	17.7
	Henry	39	38.8	24.6	Wapello	105	58.7	36.7
	Jackson	33	32.8	20.5	Webster	106	54.3	33.1
	Jasper	39	21	15.4	Winneshiek	33	31.5	18.7
					Total	1,146	36.6	24
MSA Counties	Benton	25	19	13.4	Linn	253	25.5	22.8
	Black Hawk	91	14.4	11.3	Madison	42	57.1	42.5
	Bremer	19	16.2	10.5	Mills	25	33.8	33.1
	Dallas	67	27.2	31.4	Polk	448	22.6	23.2
	Dubuque	165	36.5	26.2	Pottawattamie	109	24.6	22.3
	Grundy	31	50.5	27.1	Scott	164	20.5	20.2
	Guthrie	19	33.8	18.4	Story	97	23.6	22.8
	Harrison	16	20.6	12.8	Warren	60	28.3	26.4
	Johnson	78	13	19.3	Washington	52	49.4	28.9
	Jones	32	31.5	20.7	Woodbury	114	22.3	19.6
					Total	1,907	23.6	21.5
State Total		4,530	30.7	22.3				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Pneumonia/Influenza Mortality by County Group 1978-2006



Diabetes Mellitus Mortality 2002-2006

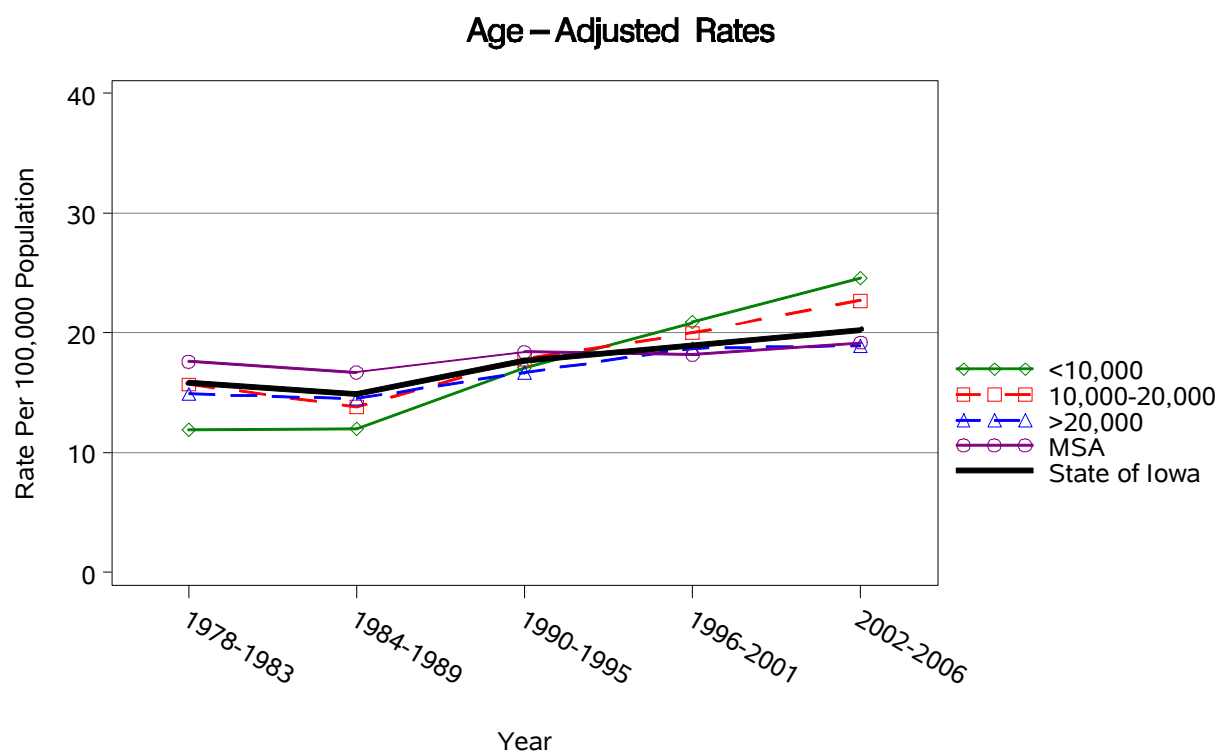
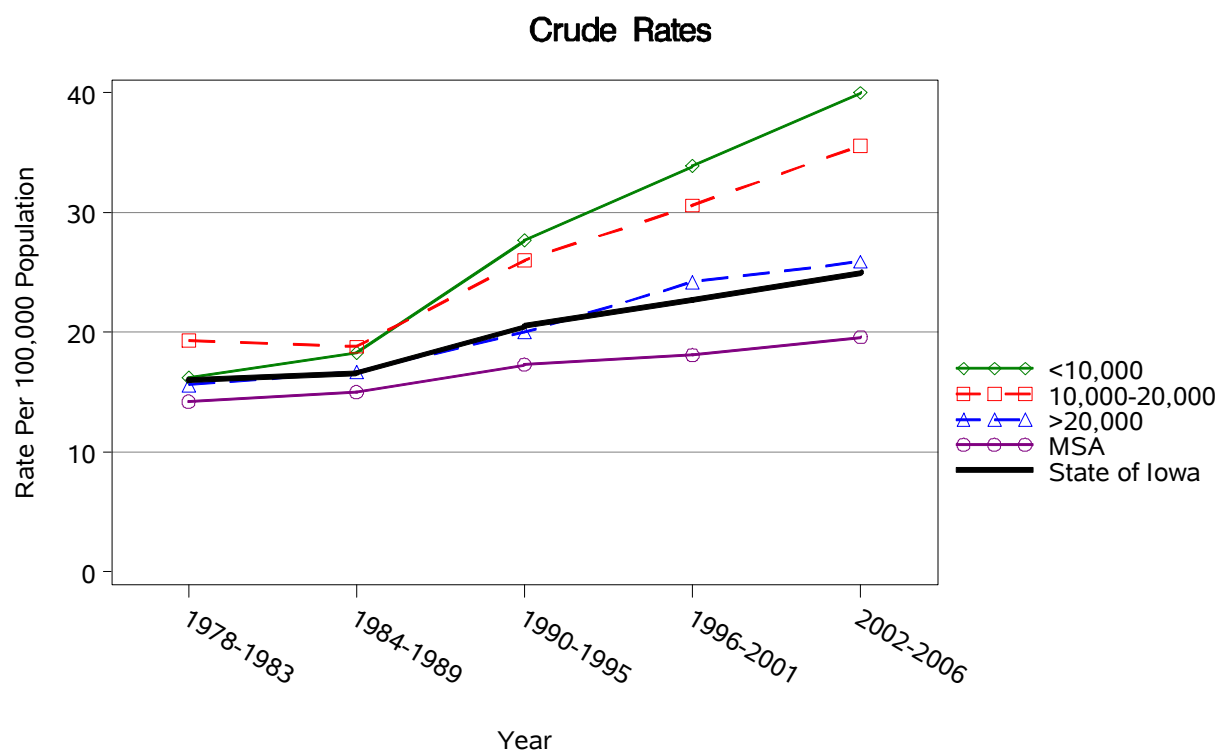
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	10	25.5	13.2	Lucas	30	63	39.9
	Adams	*	*	*	Monona	26	54.8	30.4
	Audubon	9	28.3	14	Monroe	9	23.2	17.4
	Clarke	18	39.3	30.2	Osceola	12	35.6	21.4
	Davis	18	42.2	28.9	Palo Alto	23	47.6	31.3
	Decatur	12	28.3	18	Pocahontas	21	52.5	27.9
	Fremont	17	44.4	27.1	Ringgold	28	107	53.4
	Greene	10	20.2	14.6	Taylor	11	33	20.7
	Howard	20	41.3	23.9	Van Buren	10	26	16.8
	Humboldt	11	22.1	12.8	Wayne	15	46.1	34.2
	Ida	21	57.6	30.6	Worth	13	33.6	25.1
					Total	344-8	39.5-40	24.6
Counties with Average Population 10,000 – 20,000	Allamakee	25	34.6	22.2	Hardin	47	52.2	28.7
	Appanoose	19	28.5	19.9	Iowa	21	26.5	19.8
	Buena Vista	40	40.2	30.5	Jefferson	33	42.1	32.5
	Butler	20	27.1	16.3	Keokuk	18	32.5	20.4
	Calhoun	28	53.8	28.6	Kossuth	23	28.5	16.4
	Cass	43	61.1	34.2	Louisa	13	21.6	18.4
	Cedar	22	24.4	17.7	Lyon	21	36.5	23.3
	Cherokee	19	31.1	19.5	Mitchell	14	25.8	14.4
	Chickasaw	20	32.1	20.7	Montgomery	24	42.8	26.4
	Clay	28	33.1	23.3	O'Brien	26	36	19.4
	Clayton	38	42.2	28.2	Page	38	47.1	26.9
	Crawford	30	35.9	23.8	Poweshiek	23	24.5	15.9
	Delaware	25	28.1	21	Sac	20	37.2	21
	Dickinson	34	41.2	23.7	Shelby	25	39.7	22.4
	Emmet	29	54.8	33.4	Tama	30	33.5	21.6
	Floyd	14	17	12.6	Union	16	26.7	20.6
	Franklin	11	20.7	11.8	Winnebago	30	53.4	33
	Hamilton	29	36.2	23.2	Wright	21	31	19.3
	Hancock	28	47.9	32.6	Total	945	35.6	22.7
Counties with Average Population > 20,000	Boone	34	25.9	20	Lee	53	29.1	21.3
	Buchanan	46	44.2	34.8	Mahaska	26	23.4	18.2
	Carroll	23	21.9	12.9	Marion	44	27.1	20.2
	Cerro Gordo	59	26.4	18.7	Marshall	47	24	18.2
	Clinton	62	25.1	18.6	Muscatine	45	21.5	19.8
	Des Moines	23	11.2	7.3	Plymouth	48	39	28.8
	Fayette	21	19.9	12.3	Sioux	31	19.4	15.1
	Henry	29	28.9	22.6	Wapello	62	34.7	23.9
	Jackson	24	23.9	16.2	Webster	49	25.1	18
	Jasper	58	31.2	23.2	Winneshiek	26	24.8	17.2
					Total	810	25.9	18.9
MSA Counties	Benton	31	23.5	19.8	Linn	225	22.6	21.8
	Black Hawk	128	20.2	17.6	Madison	17	23.1	19.5
	Bremer	18	15.4	11.7	Mills	8	10.8	11.2
	Dallas	37	15	18.5	Polk	307	15.5	16.7
	Dubuque	81	17.9	14.6	Pottawattamie	128	28.9	26.2
	Grundy	18	29.3	16.6	Scott	164	20.5	20.4
	Guthrie	24	42.7	26.4	Story	48	11.7	12.4
	Harrison	32	41.2	27.7	Warren	44	20.7	20.4
	Johnson	64	10.7	15.9	Washington	35	33.2	21.4
	Jones	32	31.5	24	Woodbury	148	28.9	26.6
					Total	1589	19.6	19.2
State Total		3688-92	25-25.1	20.3				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Diabetes Mellitus Mortality by County Group 1978-2006



Atherosclerosis Mortality 2002-2006

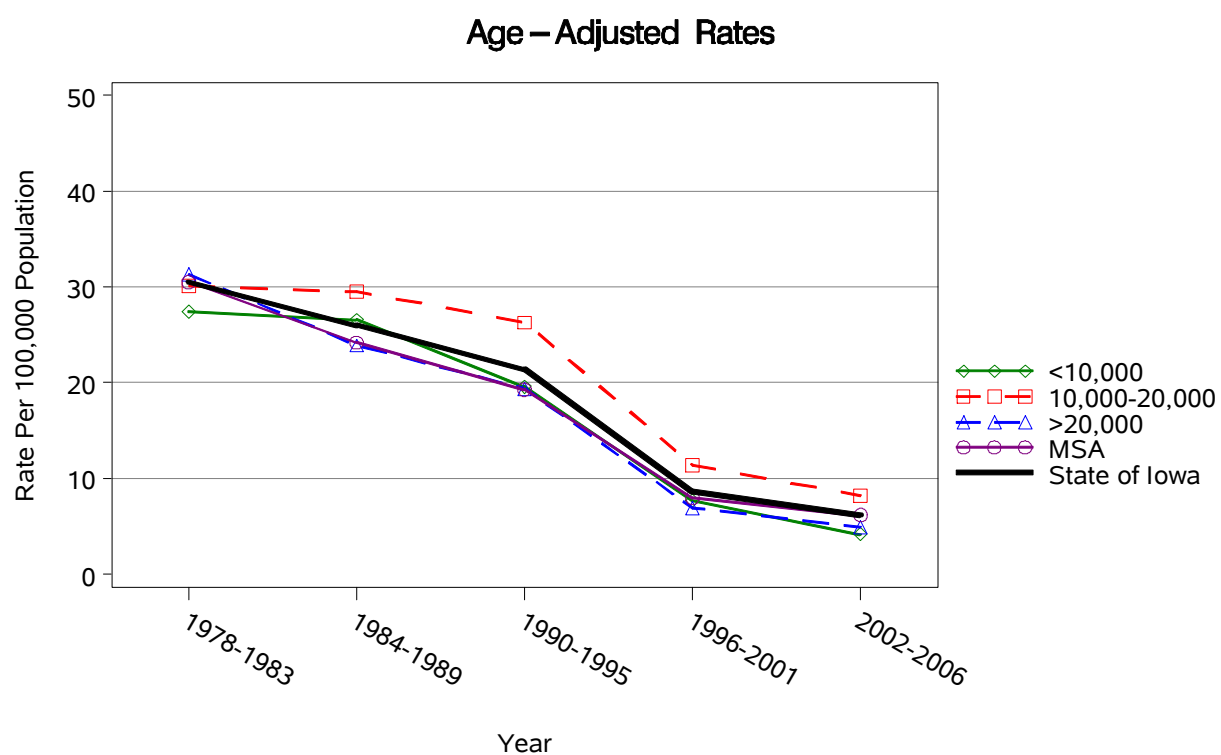
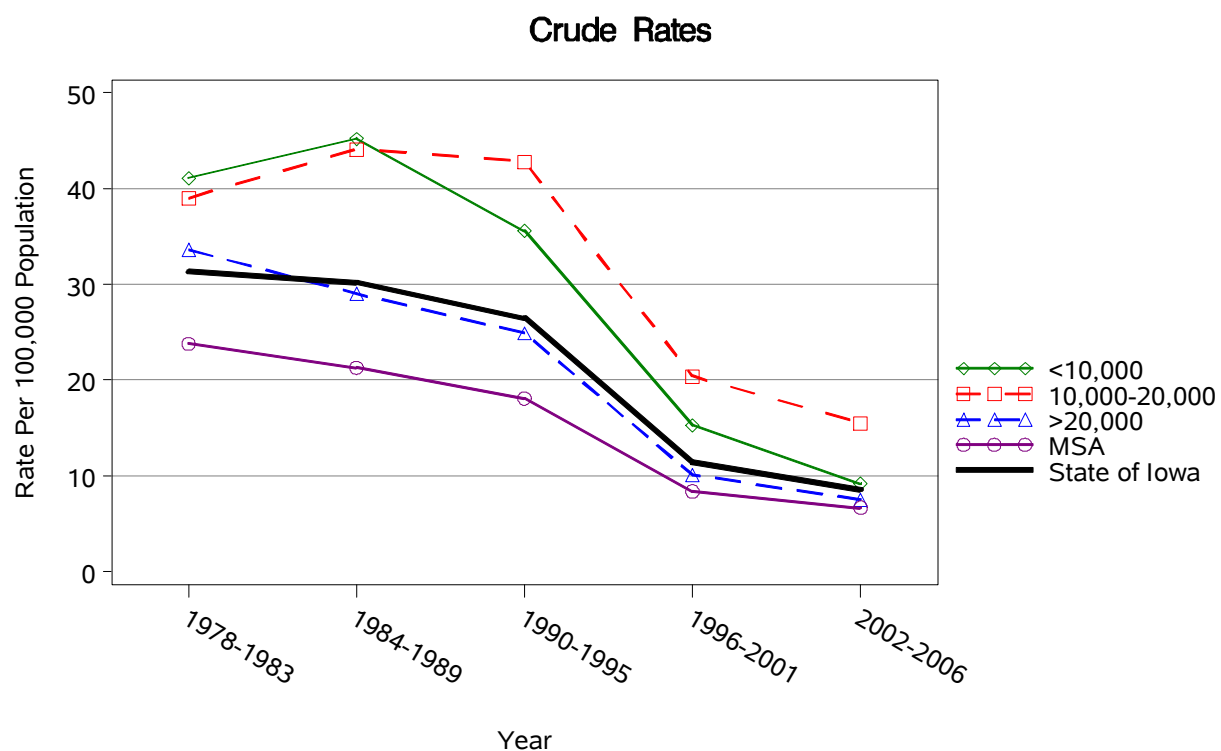
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	24	61.3	61.3	Lucas	*	*	*
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	8	20.6	10.5
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	6	14.1	14.1	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	5	13	6.4
	Humboldt	*	*	*	Wayne	5	15.4	6.4
	Ida	5	13.7	13.7	Worth	*	*	*
					Total	80	9.2	4.2
Counties with Average Population 10,000 – 20,000	Allamakee	20	27.7	15.4	Hardin	10	11.1	4.9
	Appanoose	*	*	*	Iowa	5	6.3	2.9
	Buena Vista	*	*	*	Jefferson	5	6.4	4.2
	Butler	23	31.1	16.6	Keokuk	*	*	*
	Calhoun	5	9.6	3.6	Kossuth	75	93	46.8
	Cass	*	*	*	Louisa	*	*	*
	Cedar	5	5.5	3.8	Lyon	*	*	*
	Cherokee	28	45.9	21.9	Mitchell	*	*	*
	Chickasaw	7	11.2	6.3	Montgomery	9	16.1	7.9
	Clay	9	10.7	5.8	O'Brien	*	*	*
	Clayton	*	*	*	Page	*	*	*
	Crawford	*	*	*	Poweshiek	6	6.4	3.5
	Delaware	5	5.6	3.4	Sac	13	24.2	10.5
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	*	*	*	Tama	*	*	*
	Floyd	105	127.7	65.6	Union	*	*	*
	Franklin	44	82.9	45.6	Winnebago	*	*	*
	Hamilton	*	*	*	Wright	*	*	*
	Hancock	*	*	*	Total	412	15.5	8.2
Counties with Average Population > 20,000	Boone	5	3.8	2.6	Lee	15	8.2	5.6
	Buchanan	5	4.8	3.1	Mahaska	47	42.4	29.3
	Carroll	6	5.7	2.8	Marion	13	8	4.9
	Cerro Gordo	6	2.7	1.8	Marshall	11	5.6	3.5
	Clinton	28	11.3	7.8	Muscatine	8	3.8	3.5
	Des Moines	5	2.4	1.6	Plymouth	17	13.8	9.2
	Fayette	7	6.6	2.9	Sioux	3	1.9	1.1
	Henry	10	10	6.7	Wapello	6	3.4	2.2
	Jackson	19	18.9	11.6	Webster	*	*	*
	Jasper	19	10.2	7.1	Winneshiek	*	*	*
					Total	235	7.5	4.9
MSA Counties	Benton	*	*	*	Linn	32	3.2	2.9
	Black Hawk	13	2.1	1.7	Madison	*	*	*
	Bremer	20	17.1	9.9	Mills	*	*	*
	Dallas	7	2.8	3.6	Polk	88	4.4	4.6
	Dubuque	69	15.2	11	Pottawattamie	17	3.8	3.4
	Grundy	*	*	*	Scott	124	15.5	15.6
	Guthrie	96	170.7	90.6	Story	9	2.2	2.3
	Harrison	*	*	*	Warren	5	2.4	2.1
	Johnson	20	3.3	5	Washington	19	18	8.8
	Jones	*	*	*	Woodbury	18	3.5	3
					Total	544	6.7	6.2
State Total		1,271	8.6	6.2				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Atherosclerosis Mortality by County Group 1978-2006



Infectious/Parasitic Mortality 2002-2006

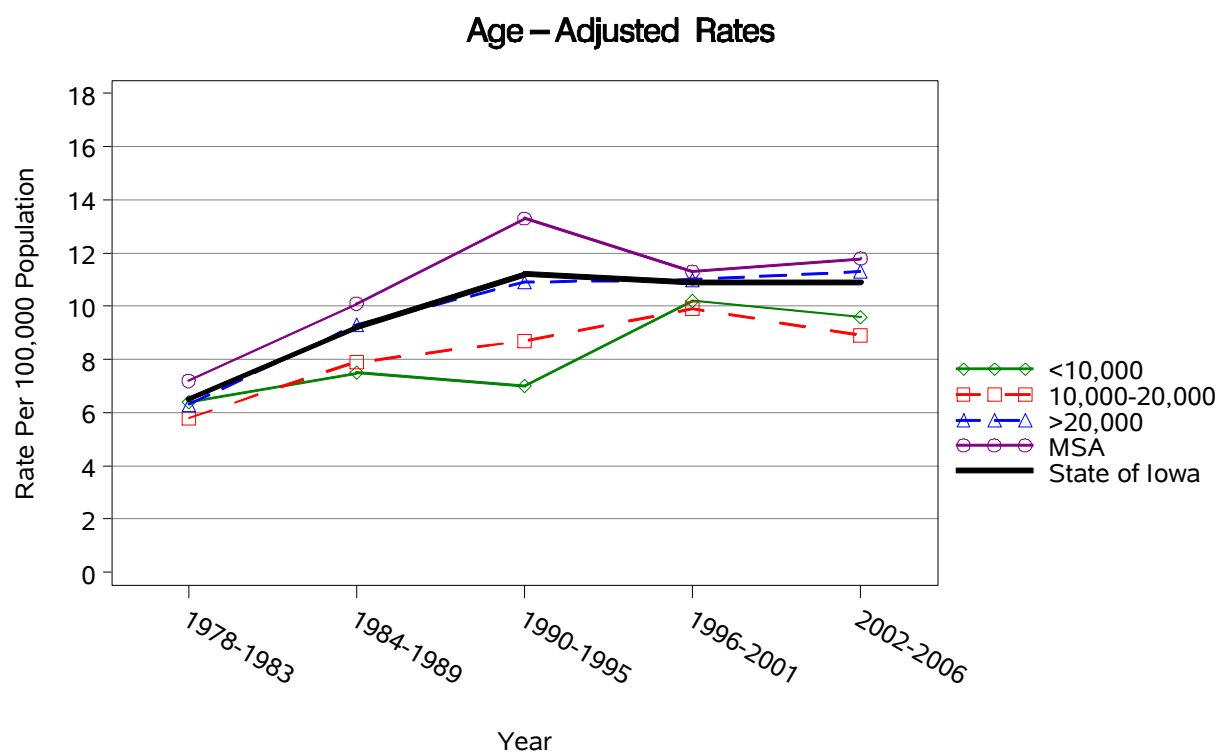
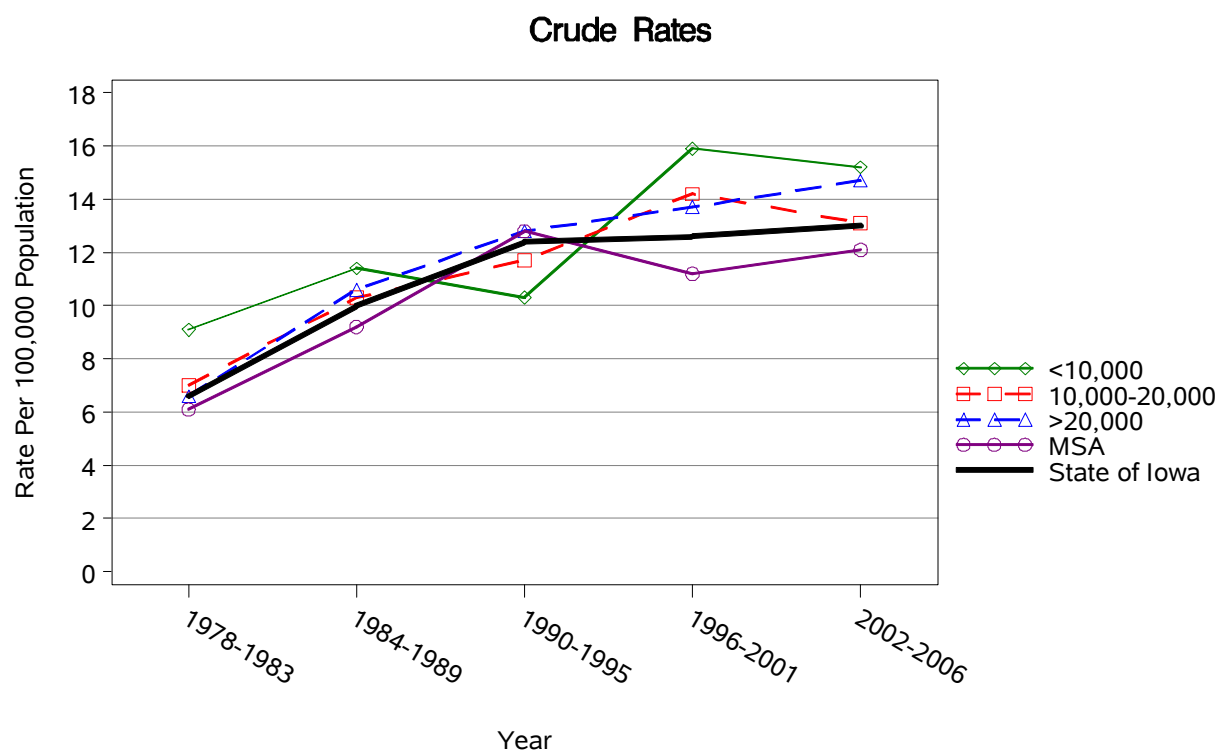
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	8	20.4	12.4	Lucas	7	14.7	10.8
	Adams	*	*	*	Monona	14	29.5	16.2
	Audubon	*	*	*	Monroe	6	15.5	11.2
	Clarke	7	15.3	10.4	Osceola	5	14.8	10.7
	Davis	*	*	*	Palo Alto	7	14.5	9.1
	Decatur	7	16.5	14.6	Pocahontas	6	15	9
	Fremont	6	15.7	10.5	Ringgold	*	*	*
	Greene	12	24.3	13.9	Taylor	8	24	13
	Howard	*	*	*	Van Buren	10	26	14.4
	Humboldt	5	10.1	4.7	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	132	15.2	9.6
Counties with Average Population 10,000 – 20,000	Allamakee	8	11.1	7.9	Hardin	11	12.2	7.3
	Appanoose	6	9	6.6	Iowa	8	10.1	5.1
	Buena Vista	14	14.1	11	Jefferson	10	12.8	9.4
	Butler	8	10.8	6.1	Keokuk	14	25.3	15.8
	Calhoun	8	15.4	8.5	Kossuth	7	8.7	7.1
	Cass	15	21.3	13.6	Louisa	6	10	8.1
	Cedar	13	14.4	9.9	Lyon	5	8.7	6.2
	Cherokee	10	16.4	10.4	Mitchell	*	*	*
	Chickasaw	*	*	*	Montgomery	8	14.3	8.9
	Clay	15	17.8	14.1	O'Brien	7	9.7	5.1
	Clayton	12	13.3	10.6	Page	27	33.5	21.5
	Crawford	13	15.6	12.2	Poweshiek	7	7.5	6.4
	Delaware	7	7.9	5.2	Sac	7	13	6.2
	Dickinson	8	9.7	7.2	Shelby	17	27	14.3
	Emmet	8	15.1	9.7	Tama	12	13.4	10.4
	Floyd	9	10.9	8.3	Union	10	16.7	12.8
	Franklin	*	*	*	Winnebago	7	12.5	5.8
	Hamilton	9	11.2	7.9	Wright	*	*	*
	Hancock	10	17.1	12.3	Total	348	13.1	8.9
Counties with Average Population > 20,000	Boone	20	15.2	11.5	Lee	42	23.1	17.1
	Buchanan	16	15.4	12.6	Mahaska	6	5.4	4.4
	Carroll	11	10.5	5.8	Marion	25	15.4	10.3
	Cerro Gordo	23	10.3	8.1	Marshall	33	16.9	13.5
	Clinton	38	15.4	11.8	Muscatine	32	15.3	14.7
	Des Moines	30	14.7	11.5	Plymouth	12	9.8	7.8
	Fayette	15	14.2	10.6	Sioux	22	13.8	10.9
	Henry	17	16.9	12.3	Wapello	37	20.7	15.7
	Jackson	17	16.9	12	Webster	35	17.9	12.8
	Jasper	23	12.4	9.9	Winneshek	7	6.7	5.1
					Total	461	14.7	11.3
MSA Counties	Benton	17	12.9	9.7	Linn	137	13.8	13.2
	Black Hawk	89	14	12.8	Madison	12	16.3	14.2
	Bremer	13	11.1	8.7	Mills	20	27.1	26.8
	Dallas	18	7.3	8.5	Polk	264	13.3	14
	Dubuque	38	8.4	6.8	Pottawattamie	60	13.5	12.4
	Grundy	11	17.9	12.8	Scott	104	13	12.8
	Guthrie	6	10.7	7.1	Story	23	5.6	6.4
	Harrison	*	*	*	Warren	21	9.9	9.1
	Johnson	34	5.7	7.6	Washington	17	16.1	11.8
	Jones	15	14.8	11.3	Woodbury	76	14.8	13.8
					Total	975-979	12-12.1	11.8
State Total		1916-20	12.9-13	10.9				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Infectious/Parasitic Mortality by County Group 1978-2006



Nephritis, Nephrotic Syndrome, Nephrosis Mortality 2002-2006

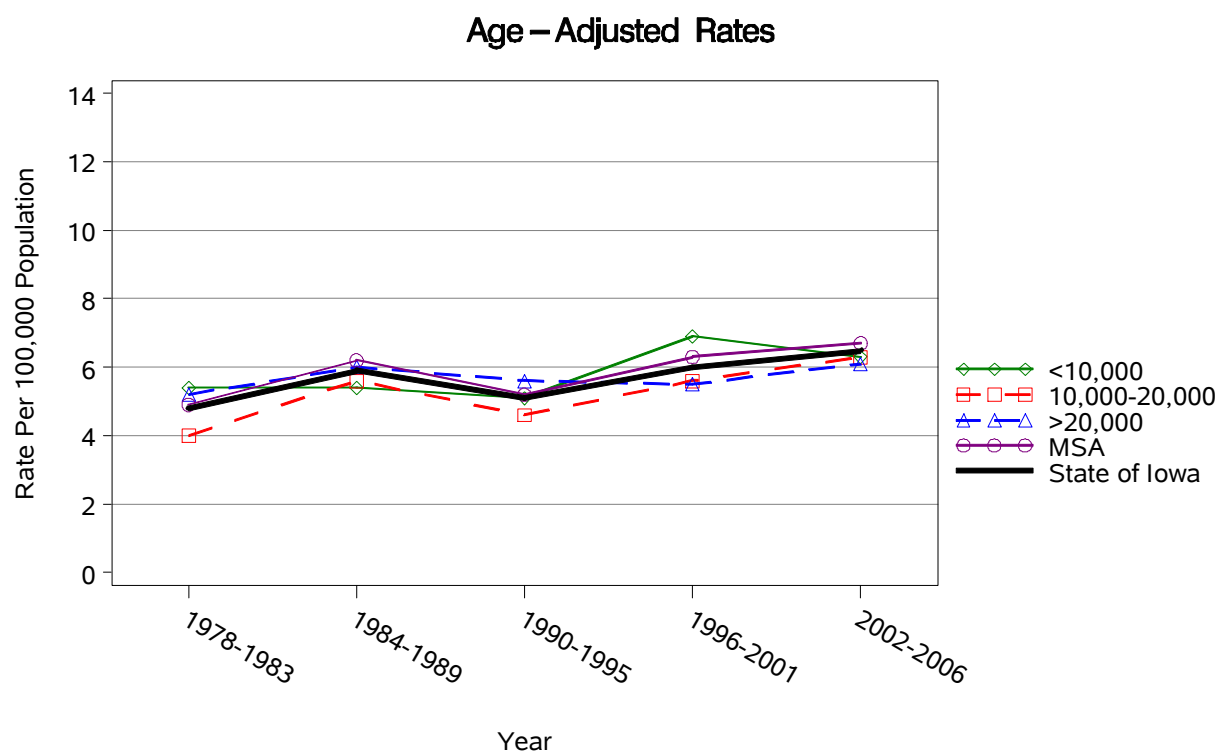
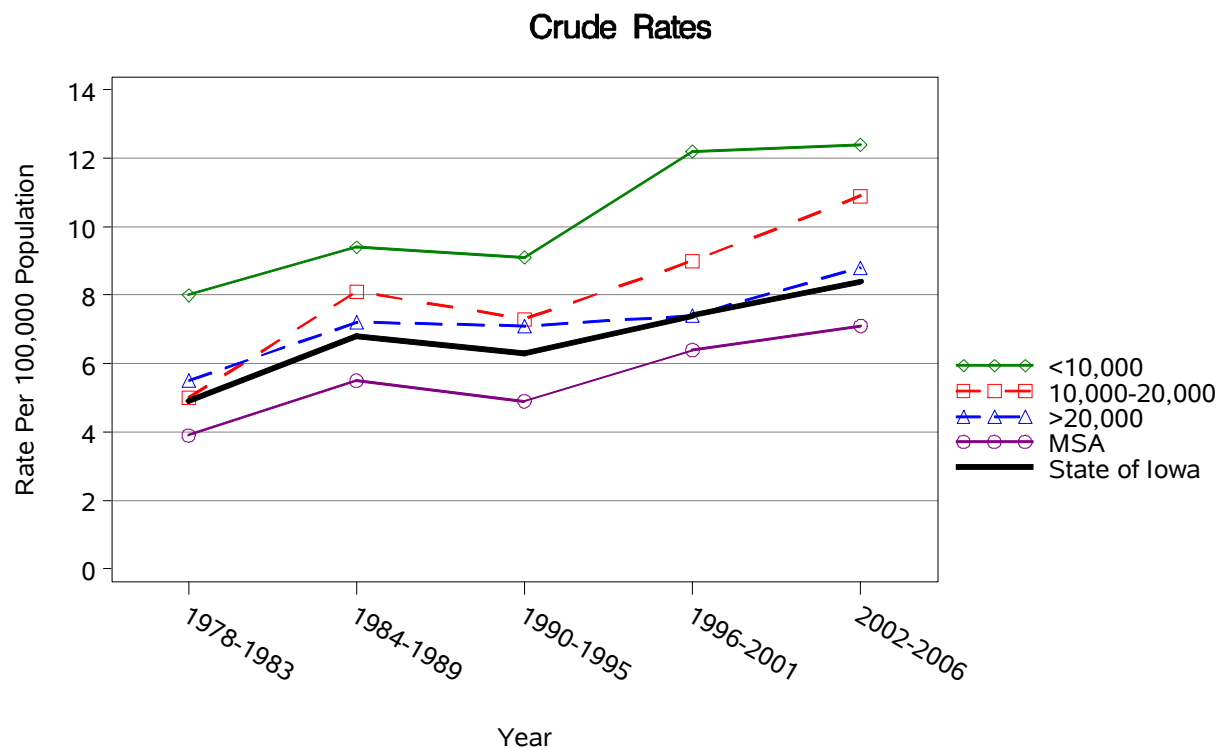
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	7	17.9	8	Lucas	*	*	*
	Adams	*	*	*	Monona	13	27.4	11.8
	Audubon	6	18.9	6.4	Monroe	*	*	*
	Clarke	7	15.3	9.6	Osceola	5	14.8	9.2
	Davis	8	18.7	10.5	Palo Alto	*	*	*
	Decatur	6	14.1	9.3	Pocahontas	*	*	*
	Fremont	8	20.9	10.7	Ringgold	*	*	*
	Greene	6	12.1	5.7	Taylor	*	*	*
	Howard	*	*	*	Van Buren	5	13	7.4
	Humboldt	7	14.1	7.2	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	108	12.4	6.3
Counties with Average Population 10,000 – 20,000	Allamakee	12	16.6	10.6	Hardin	11	12.2	6.3
	Appanoose	6	9	5.5	Iowa	*	*	*
	Buena Vista	7	7	4.6	Jefferson	5	6.4	5.9
	Butler	18	24.4	13	Keokuk	6	10.8	6.3
	Calhoun	7	13.4	5	Kossuth	6	7.4	3.7
	Cass	9	12.8	6.5	Louisa	*	*	*
	Cedar	6	6.7	4.9	Lyon	10	17.4	10.9
	Cherokee	9	14.7	8.4	Mitchell	6	11.1	6.4
	Chickasaw	5	8	4.3	Montgomery	13	23.2	11.6
	Clay	14	16.6	10.5	O'Brien	7	9.7	3.5
	Clayton	6	6.7	3.4	Page	15	18.6	9.7
	Crawford	11	13.2	8.8	Poweshiek	5	5.3	2.9
	Delaware	7	7.9	5.1	Sac	8	14.9	6.5
	Dickinson	14	17	9.6	Shelby	6	9.5	6.4
	Emmet	5	9.4	6.8	Tama	10	11.2	6.4
	Floyd	8	9.7	4.9	Union	13	21.7	11.3
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	8	10	7	Wright	5	7.4	3.8
	Hancock	*	*	*	Total	290	10.9	6.3
Counties with Average Population > 20,000	Boone	16	12.2	8.1	Lee	31	17	10.9
	Buchanan	16	15.4	11.1	Mahaska	6	5.4	3.8
	Carroll	8	7.6	4.1	Marion	15	9.3	6.6
	Cerro Gordo	12	5.4	3.5	Marshall	22	11.2	8.3
	Clinton	23	9.3	6.6	Muscatine	13	6.2	6.1
	Des Moines	19	9.3	6.2	Plymouth	8	6.5	4.5
	Fayette	15	14.2	8	Sioux	13	8.1	5.1
	Henry	5	5	4.7	Wapello	10	5.6	3.6
	Jackson	8	8	5.3	Webster	16	8.2	5.9
	Jasper	12	6.5	4.8	Winneshiek	6	5.7	4.7
					Total	274	8.8	6.1
MSA Counties	Benton	9	6.8	4.6	Linn	55	5.5	5.1
	Black Hawk	56	8.8	7.1	Madison	9	12.2	8.7
	Bremer	12	10.3	6.9	Mills	11	14.9	13.2
	Dallas	10	4.1	5.3	Polk	95	4.8	5.2
	Dubuque	34	7.5	5.7	Pottawattamie	49	11.1	10.2
	Grundy	11	17.9	10.8	Scott	71	8.9	8.7
	Guthrie	5	8.9	4.6	Story	18	4.4	4.3
	Harrison	10	12.9	8.2	Warren	13	6.1	5.8
	Johnson	25	4.2	6.1	Washington	6	5.7	3.9
	Jones	11	10.8	7.7	Woodbury	61	11.9	10.8
					Total	571	7.1	6.7
State Total		1,243	8.4	6.5				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Nephritis, Nephrotic Syndrome, Nephrosis Mortality by County Group 1978-2006



Chronic Liver Disease and Cirrhosis Mortality 2002-2006

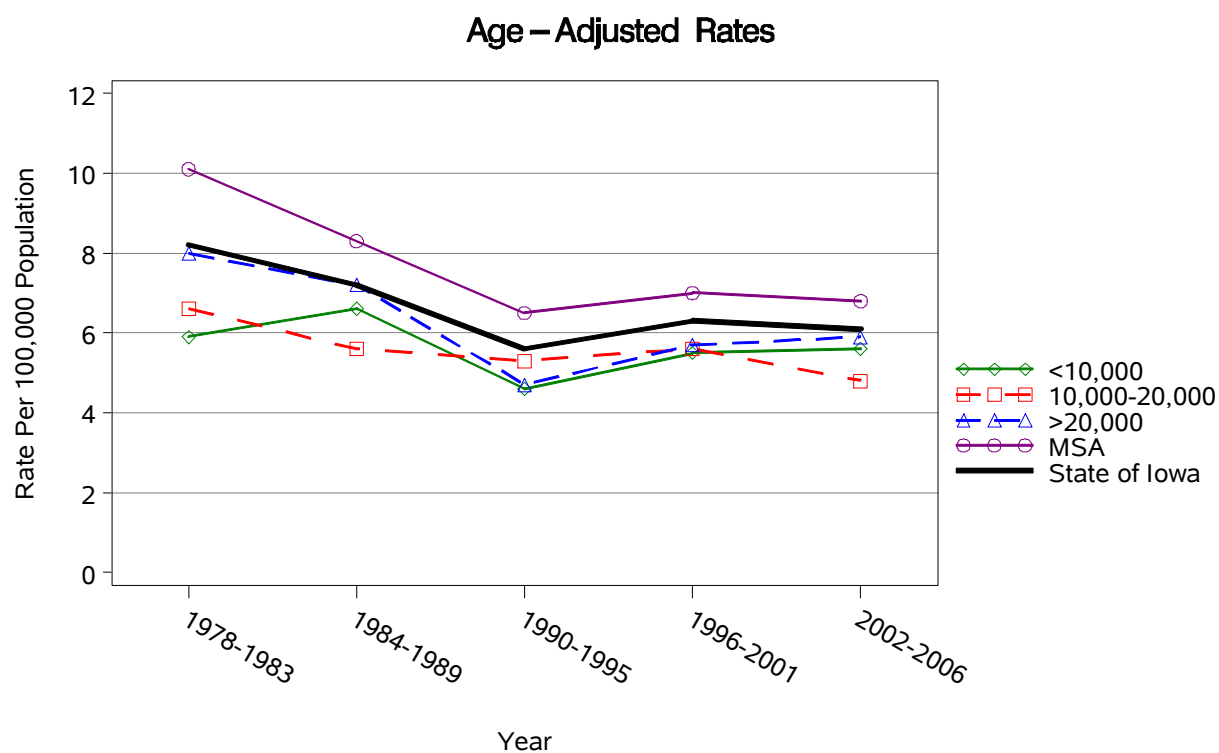
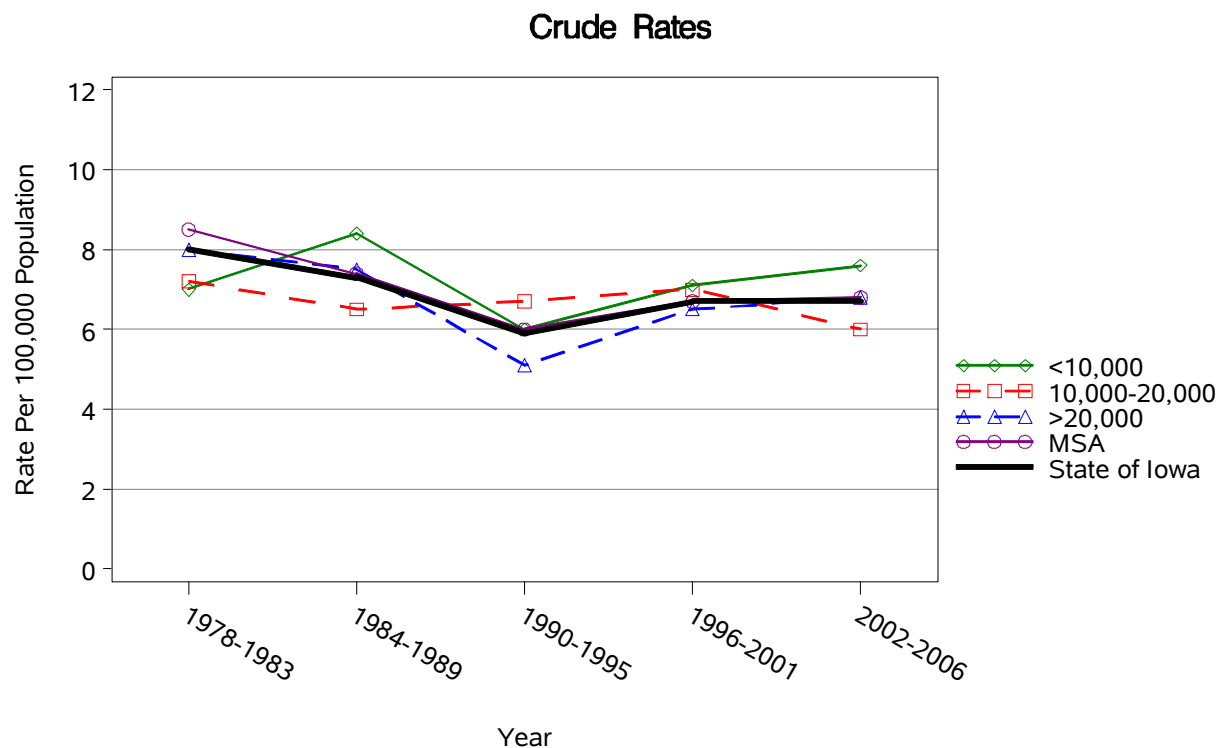
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	8	16.9	11.6
	Audubon	5	15.7	10.2	Monroe	*	*	*
	Clarke	5	10.9	8.5	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	5	12.5	8.9
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	66	7.6	5.6
Counties with Average Population 10,000 – 20,000	Allamakee	6	8.3	6.6	Hardin	*	*	*
	Appanoose	*	*	*	Iowa	5	6.3	6.1
	Buena Vista	5	5	5	Jefferson	6	7.7	5.4
	Butler	6	8.1	5.4	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	6	10.4	7.7
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	5	8	6.3	Montgomery	*	*	*
	Clay	7	8.3	7.3	O'Brien	*	*	*
	Clayton	6	6.7	4.6	Page	*	*	*
	Crawford	5	6	5.3	Poweshiek	5	5.3	4.5
	Delaware	6	6.7	5.9	Sac	*	*	*
	Dickinson	10	12.1	9	Shelby	*	*	*
	Emmet	5	9.4	7.9	Tama	8	8.9	8.4
	Floyd	*	*	*	Union	*	*	*
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	10	12.5	9.8	Wright	*	*	*
	Hancock	*	*	*	Total	159	6	4.8
Counties with Average Population > 20,000	Boone	9	6.9	6.1	Lee	19	10.4	8.8
	Buchanan	*	*	*	Mahaska	5	4.5	4
	Carroll	7	6.7	5.1	Marion	13	8	7.2
	Cerro Gordo	18	8	7.2	Marshall	23	11.8	9.5
	Clinton	15	6.1	5.1	Muscatine	10	4.8	4.7
	Des Moines	15	7.3	5.7	Plymouth	*	*	*
	Fayette	6	5.7	4.4	Sioux	7	4.4	3.9
	Henry	5	5	5	Wapello	11	6.2	4.9
	Jackson	*	*	*	Webster	24	12.3	10.7
	Jasper	14	7.5	6.4	Winneshiek	*	*	*
					Total	214	6.8	5.9
MSA Counties	Benton	8	6.1	5.4	Linn	62	6.2	6.2
	Black Hawk	48	7.6	7.2	Madison	*	*	*
	Bremer	6	5.1	4.3	Mills	5	6.8	6.8
	Dallas	7	2.8	3.2	Polk	180	9.1	9.3
	Dubuque	26	5.7	5.2	Pottawattamie	30	6.8	6.2
	Grundy	5	8.2	5.6	Scott	54	6.8	6.5
	Guthrie	9	16	11.8	Story	18	4.4	5.7
	Harrison	*	*	*	Warren	9	4.2	3.7
	Johnson	14	2.3	3.5	Washington	*	*	*
	Jones	5	4.9	4.6	Woodbury	55	10.7	10.4
					Total	551	6.8	6.8
	State Total	990	6.7	6.1				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Chronic Liver Disease and Cirrhosis Mortality by County Group 1978-2006



Congenital Anomalies Mortality 2002-2006

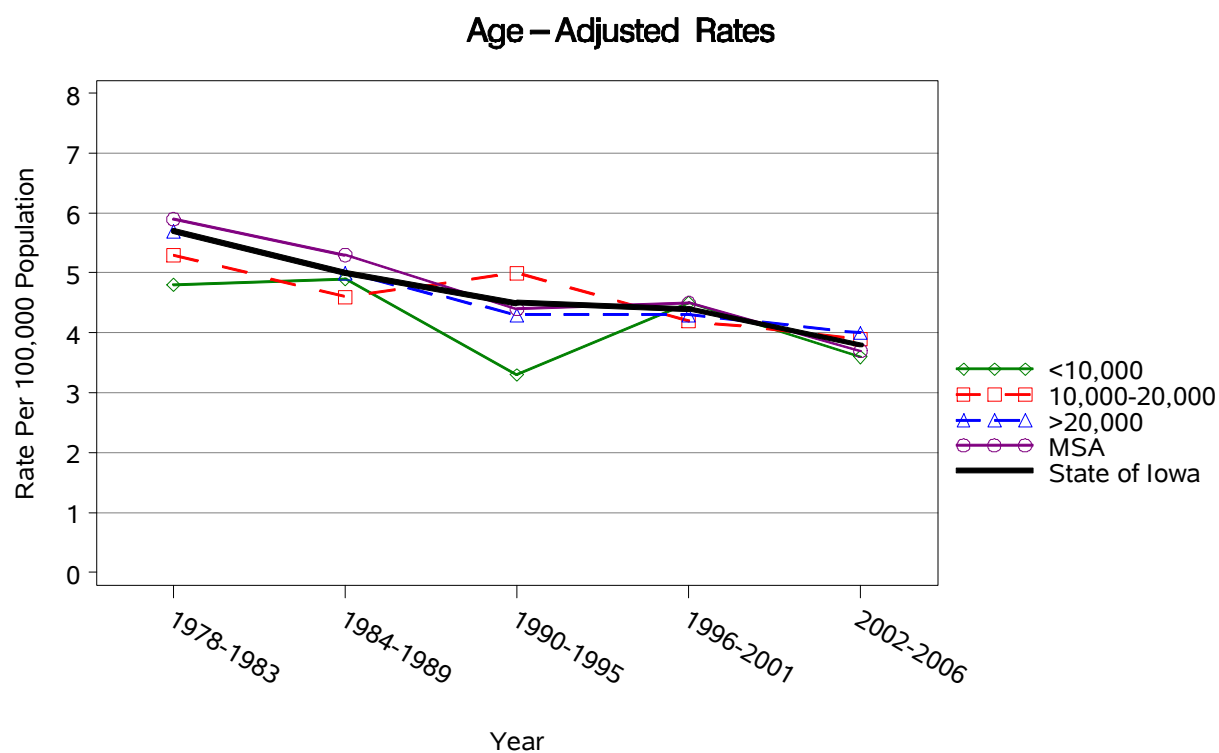
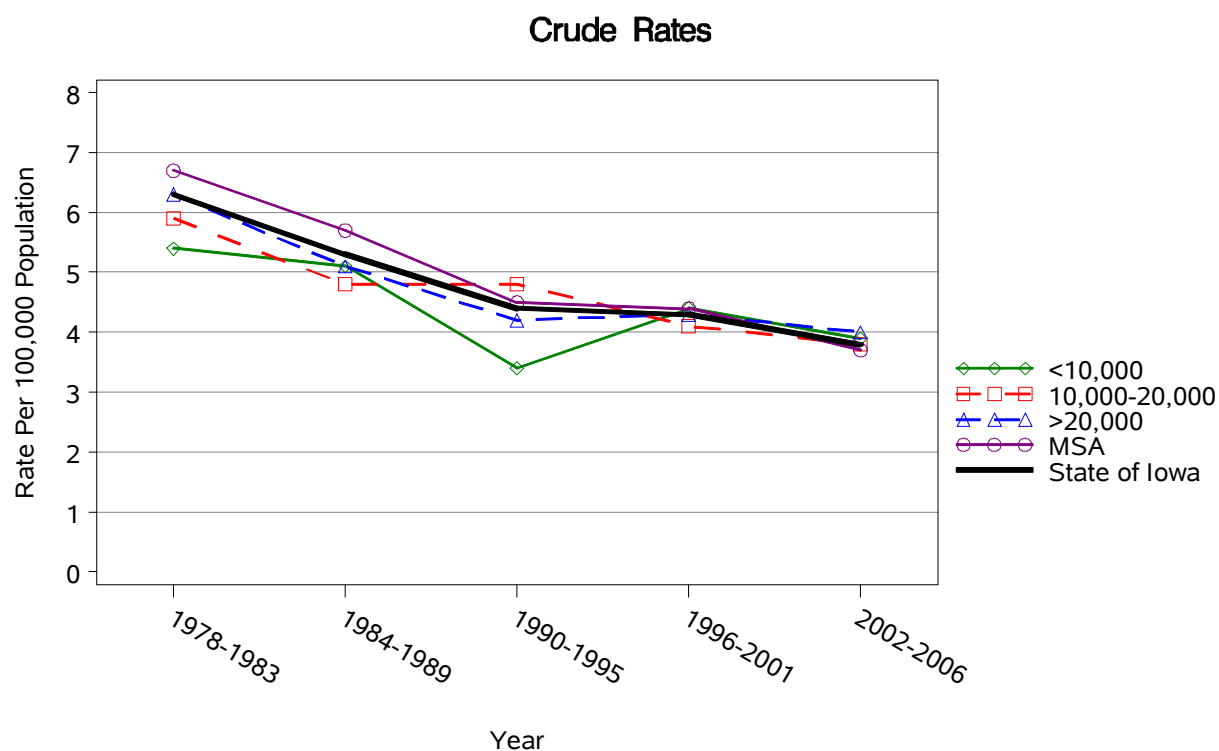
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	5	10.4	10.1
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	34	3.9	3.6
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Iowa	6	7.6	6.6
	Buena Vista	*	*	*	Jefferson	*	*	*
	Butler	5	6.8	8.5	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	*	*	*
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	*	*	*	Montgomery	*	*	*
	Clay	6	7.1	8	O'Brien	*	*	*
	Clayton	*	*	*	Page	*	*	*
	Crawford	*	*	*	Poweshiek	*	*	*
	Delaware	5	5.6	6.1	Sac	*	*	*
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	*	*	*	Tama	*	*	*
	Floyd	5	6.1	6.2	Union	*	*	*
	Franklin	*	*	*	Winnebago	5	8.9	11.9
	Hamilton	*	*	*	Wright	*	*	*
	Hancock	*	*	*	Total	101	3.8	3.9
Counties with Average Population > 20,000	Boone	*	*	*	Lee	6	3.3	4.2
	Buchanan	6	5.8	5.4	Mahaska	*	*	*
	Carroll	*	*	*	Marion	10	6.2	5.8
	Cerro Gordo	18	8	7.8	Marshall	*	*	*
	Clinton	17	6.9	7.4	Muscatine	9	4.3	4.2
	Des Moines	6	2.9	3	Plymouth	*	*	*
	Fayette	*	*	*	Sioux	8	5	4.8
	Henry	*	*	*	Wapello	*	*	*
	Jackson	6	6	6.7	Webster	6	3.1	3.3
	Jasper	5	2.7	2.6	Winneshiek	*	*	*
					Total	125	4	4
MSA Counties	Benton	5	3.8	3.6	Linn	37	3.7	3.6
	Black Hawk	22	3.5	3.5	Madison	*	*	*
	Bremer	6	5.1	6.3	Mills	5	6.8	6.9
	Dallas	7	2.8	3.1	Polk	82	4.1	3.8
	Dubuque	13	2.9	3	Pottawattamie	22	5	5
	Grundy	*	*	*	Scott	22	2.8	2.7
	Guthrie	*	*	*	Story	14	3.4	4.4
	Harrison	*	*	*	Warren	7	3.3	3.6
	Johnson	16	2.7	3.1	Washington	7	6.6	5.9
	Jones	*	*	*	Woodbury	25	4.9	4.4
					Total	301	3.7	3.7
State Total		561	3.8	3.8				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Congenital Anomalies Mortality by County Group 1978-2006



Conditions Originating in Perinatal Period Mortality 2002-2006

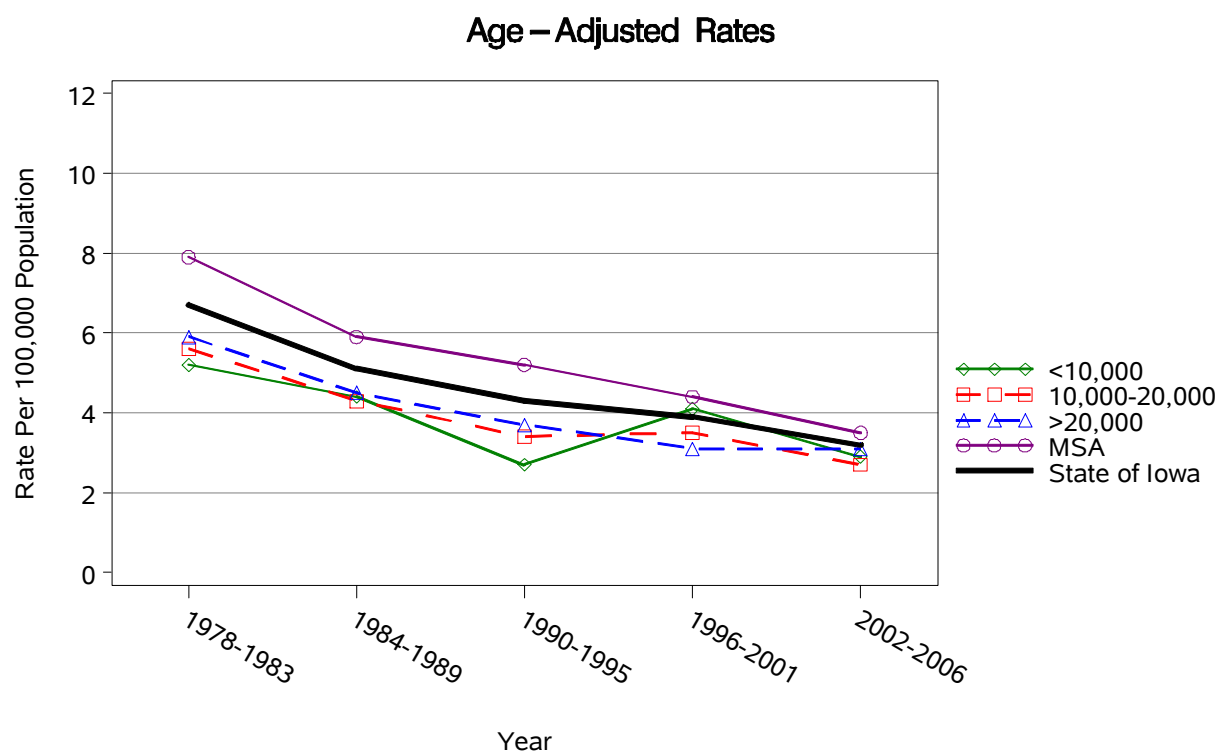
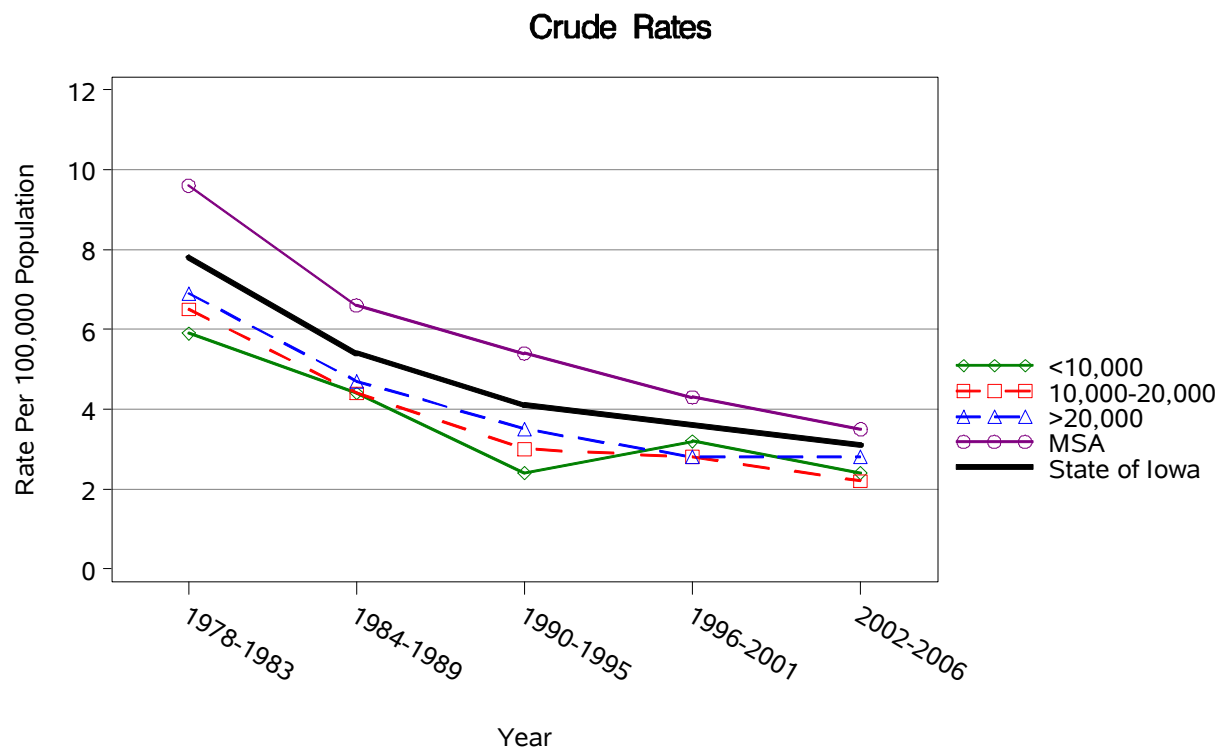
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monona	*	*	*
	Audubon	*	*	*	Monroe	*	*	*
	Clarke	*	*	*	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	*	*	*
	Decatur	*	*	*	Pocahontas	*	*	*
	Fremont	*	*	*	Ringgold	*	*	*
	Greene	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Humboldt	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
					Total	21	2.4	2.9
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Iowa	*	*	*
	Buena Vista	*	*	*	Jefferson	*	*	*
	Butler	*	*	*	Keokuk	*	*	*
	Calhoun	*	*	*	Kossuth	*	*	*
	Cass	*	*	*	Louisa	*	*	*
	Cedar	*	*	*	Lyon	*	*	*
	Cherokee	*	*	*	Mitchell	*	*	*
	Chickasaw	*	*	*	Montgomery	*	*	*
	Clay	*	*	*	O'Brien	*	*	*
	Clayton	*	*	*	Page	*	*	*
	Crawford	*	*	*	Poweshiek	*	*	*
	Delaware	*	*	*	Sac	*	*	*
	Dickinson	*	*	*	Shelby	*	*	*
	Emmet	6	11.3	11.9	Tama	*	*	*
	Floyd	*	*	*	Union	*	*	*
	Franklin	*	*	*	Winnebago	*	*	*
	Hamilton	*	*	*	Wright	*	*	*
	Hancock	*	*	*	Total	59	2.2	2.7
Counties with Average Population > 20,000	Boone	*	*	*	Lee	6	3.3	4.1
	Buchanan	6	5.8	5.5	Mahaska	7	6.3	6.9
	Carroll	*	*	*	Marion	5	3.1	3.4
	Cerro Gordo	*	*	*	Marshall	*	*	*
	Clinton	10	4	4.6	Muscatine	*	*	*
	Des Moines	8	3.9	4.3	Plymouth	*	*	*
	Fayette	*	*	*	Sioux	*	*	*
	Henry	*	*	*	Wapello	5	2.8	2.9
	Jackson	*	*	*	Webster	*	*	*
	Jasper	7	3.8	4.4	Winneshiek	*	*	*
					Total	89	2.8	3.1
MSA Counties	Benton	*	*	*	Linn	38	3.8	3.8
	Black Hawk	16	2.5	2.7	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	10	4.1	4.1	Polk	91	4.6	3.9
	Dubuque	11	2.4	2.5	Pottawattamie	20	4.5	4.6
	Grundy	*	*	*	Scott	31	3.9	3.7
	Guthrie	*	*	*	Story	8	1.9	2.4
	Harrison	*	*	*	Warren	5	2.4	2.7
	Johnson	18	3	3.3	Washington	*	*	*
	Jones	*	*	*	Woodbury	15	2.9	2.6
					Total	284	3.5	3.5
State Total		453	3.1	3.2				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Conditions Originating in Perinatal Period Mortality by County Group 1978-2006



Alzheimer's Disease Mortality 2002-2006

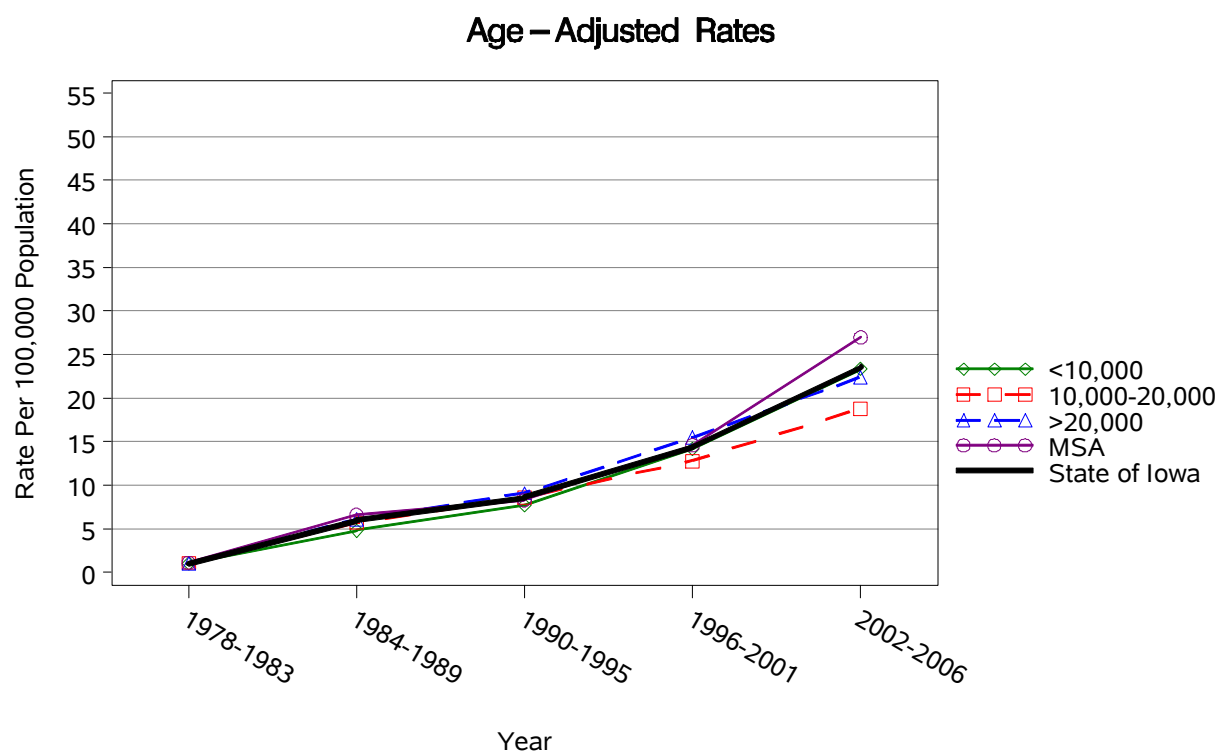
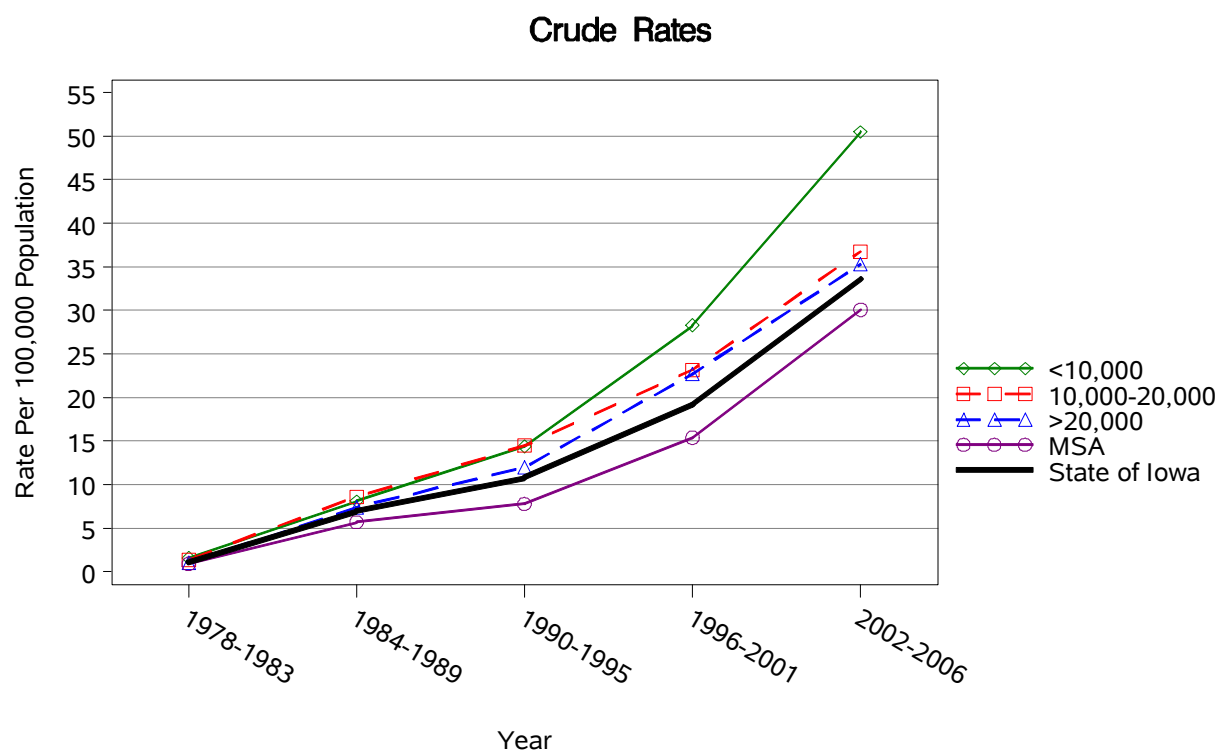
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	5	12.8	4.5	Lucas	23	48.3	26.2
	Adams	10	47	19.7	Monona	34	71.6	24.8
	Audubon	41	129	51.2	Monroe	18	46.4	25.2
	Clarke	27	58.9	32	Osceola	*	*	*
	Davis	*	*	*	Palo Alto	30	62.1	27.3
	Decatur	10	23.6	14	Pocahontas	17	42.5	16.7
	Fremont	20	52.2	25.6	Ringgold	31	118.5	50.3
	Greene	13	26.3	11	Taylor	20	60	25.4
	Howard	30	62	29.3	Van Buren	16	41.7	22.3
	Humboldt	21	42.3	19.2	Wayne	13	39.9	18.1
	Ida	21	57.6	26.8	Worth	37	95.7	47.9
					Total	440	50.5	23.4
Counties with Average Population 10,000 – 20,000	Allamakee	26	36	19.5	Hardin	65	72.1	31.8
	Appanoose	17	25.5	12.7	Iowa	21	26.5	15.8
	Buena Vista	29	29.1	18.4	Jefferson	22	28.1	19.2
	Butler	16	21.7	10.5	Keokuk	9	16.3	7.7
	Calhoun	41	78.8	30	Kossuth	50	62	29.6
	Cass	26	36.9	16.7	Louisa	12	20	15.2
	Cedar	6	6.7	3.6	Lyon	21	36.5	19.3
	Cherokee	15	24.6	12.6	Mitchell	*	*	*
	Chickasaw	16	25.6	15.4	Montgomery	18	32.1	14.6
	Clay	30	35.5	20	O'Brien	25	34.7	14.2
	Clayton	43	47.7	25.3	Page	18	22.3	10.7
	Crawford	32	38.3	22.2	Poweshiek	52	55.5	29.3
	Delaware	26	29.2	18.4	Sac	18	33.5	13.5
	Dickinson	21	25.5	13.1	Shelby	28	44.4	22.1
	Emmet	25	47.2	22.5	Tama	51	57	31.1
	Floyd	38	46.2	23.5	Union	25	41.7	22.2
	Franklin	26	49	23.7	Winnebago	22	39.2	18.2
	Hamilton	25	31.2	18	Wright	31	45.8	20
	Hancock	29	49.6	25.4	Total	975-9	36.7-36.9	18.8
Counties with Average Population > 20,000	Boone	54	41.2	26	Lee	82	45.1	27.3
	Buchanan	25	24	18.5	Mahaska	17	15.3	9.6
	Carroll	41	39.1	18.8	Marion	55	33.9	21.3
	Cerro Gordo	127	56.8	33.7	Marshall	157	80.3	55.3
	Clinton	60	24.3	16.3	Muscatine	37	17.6	16
	Des Moines	51	24.9	14.6	Plymouth	60	48.8	32.1
	Fayette	58	55	26.4	Sioux	29	18.2	11.6
	Henry	12	11.9	7.8	Wapello	50	28	17
	Jackson	20	19.9	11.9	Webster	78	39.9	23.1
	Jasper	69	37.1	26	Winnesiek	22	21	11.9
					Total	1,104	35.3	22.4
MSA Counties	Benton	23	17.4	12.1	Linn	255	25.7	22.9
	Black Hawk	138	21.8	16.2	Madison	43	58.4	42.8
	Bremer	45	38.5	23.4	Mills	17	23	22.9
	Dallas	78	31.6	36.2	Polk	622	31.3	32.1
	Dubuque	145	32	22.1	Pottawattamie	146	32.9	29.3
	Grundy	39	63.6	31.1	Scott	249	31.2	30.8
	Guthrie	23	40.9	22.4	Story	77	18.7	18.3
	Harrison	32	41.2	24.2	Warren	143	67.3	61.5
	Johnson	87	14.5	21.8	Washington	33	31.3	15.2
	Jones	32	31.5	20.8	Woodbury	209	40.8	34.6
					Total	2,436	30.1	27
State Total		4,955-9	33.6-33.7	23.6				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

* represents a count less than 5

Alzheimer's Disease Mortality by County Group 1978-2006



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Health Care Providers

The Office of Statewide Clinical Education Programs (OSCEP) at the University of Iowa Carver College of Medicine, the Iowa Department of Public Health, Board of Nursing, and the Bureau of Emergency Medical Services collect the health care provider data presented in this Iowa Health Fact Book.

OSCEP provides an up-to-date inventory of physicians, physician assistants, advanced registered nurse practitioners, pharmacists, and dentists, which facilitates tracking trends in Iowa health professionals and provides feedback to the health science colleges on the progress of their programs.

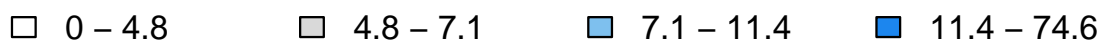
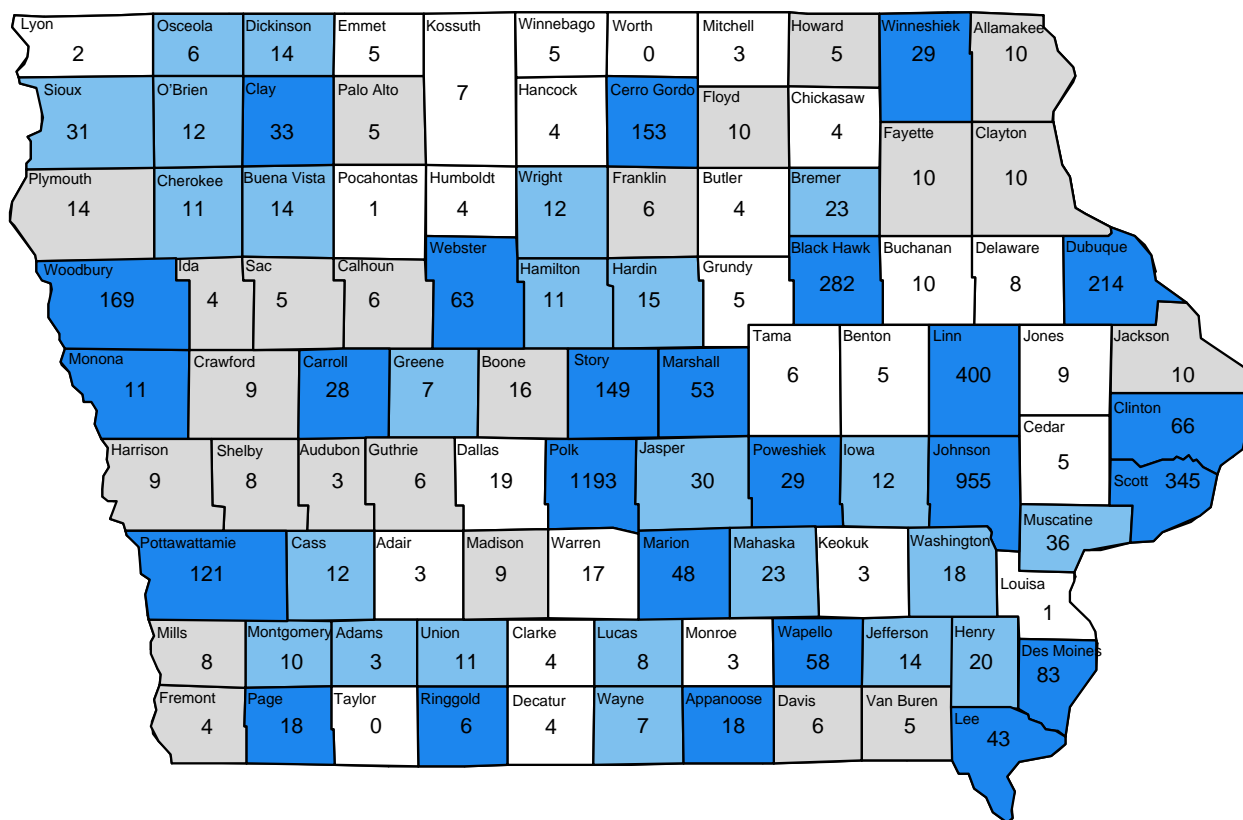
The Board of Nursing enforces and regulates nursing education, nursing practice, and continuing education for nurses. It sets standards, provides evaluation and licensing, and investigates complaints about licensed practical nurses, registered nurses, and advanced registered nurse practitioners. Its mission is “to protect the public health, safety and welfare of Iowans by ensuring that nursing is practiced by competent licensed individuals within their practice field.” Data related to the nursing supply are housed within the Board of Nursing.

The Bureau of Emergency Medical Services (EMS) is a regulatory agency that establishes initial training, continuing education, and renewal requirements leading to certification of emergency medical care providers, including those presented here. The EMS Bureau is also responsible for the authorization and regulation of EMS service programs (levels First Responder through Paramedic), and a statewide trauma system. In addition, the Bureau has statewide programs dealing with system development initiatives, injury prevention, and emergency medical services for children.

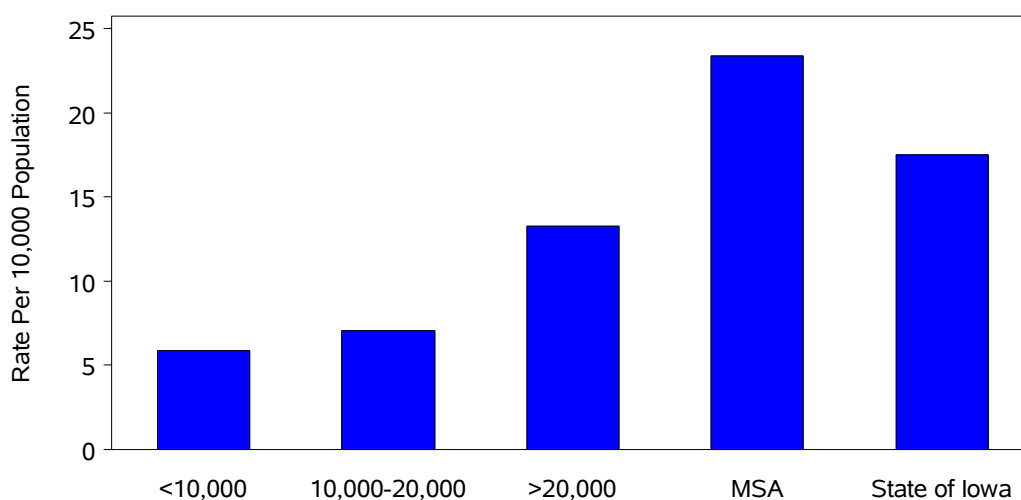
Seventeen other licensing boards are housed at the Iowa Department of Public Health, which collect data about practice, licensing/certification, and other supply information.

Total Physicians

2009 Counts and Crude Rates per 10,000 (shaded)



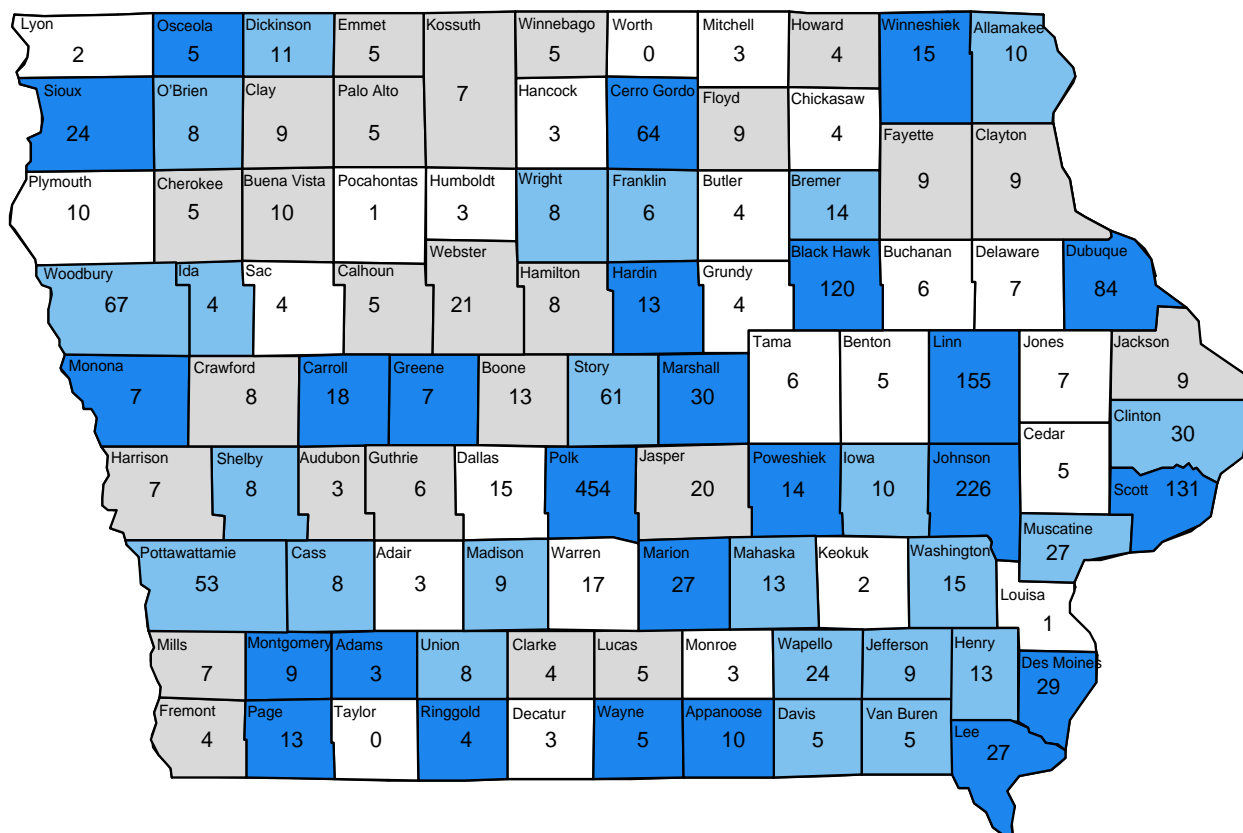
2009 Crude Rates by County Group



Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

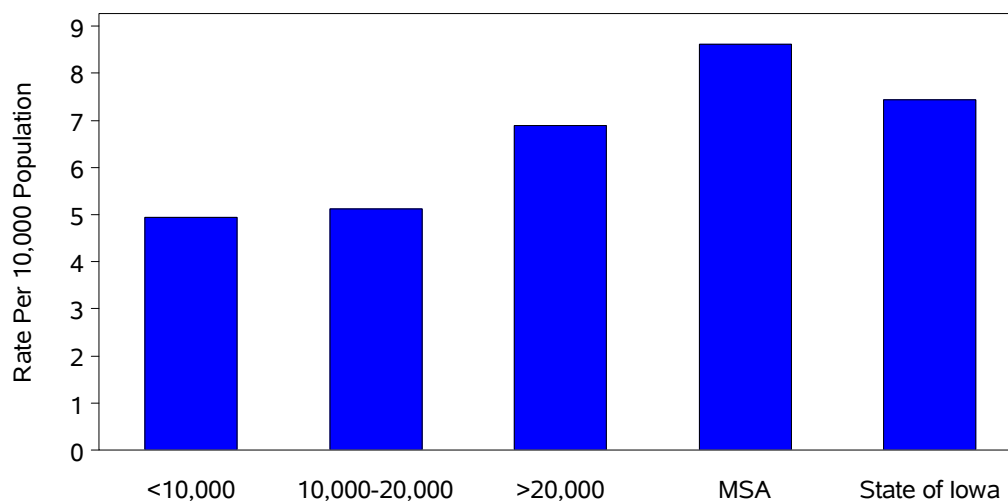
Primary Care Physicians¹

2009 Counts and Crude Rates per 10,000 (shaded)



□ 0 – 4.2 □ 4.2 – 5.6 □ 5.6 – 7.1 □ 7.1 – 17.7

2009 Crude Rates by County Group



¹Includes Family Practice, Internal Medicine, Pediatric, and Obstetrics/Gynecology physicians

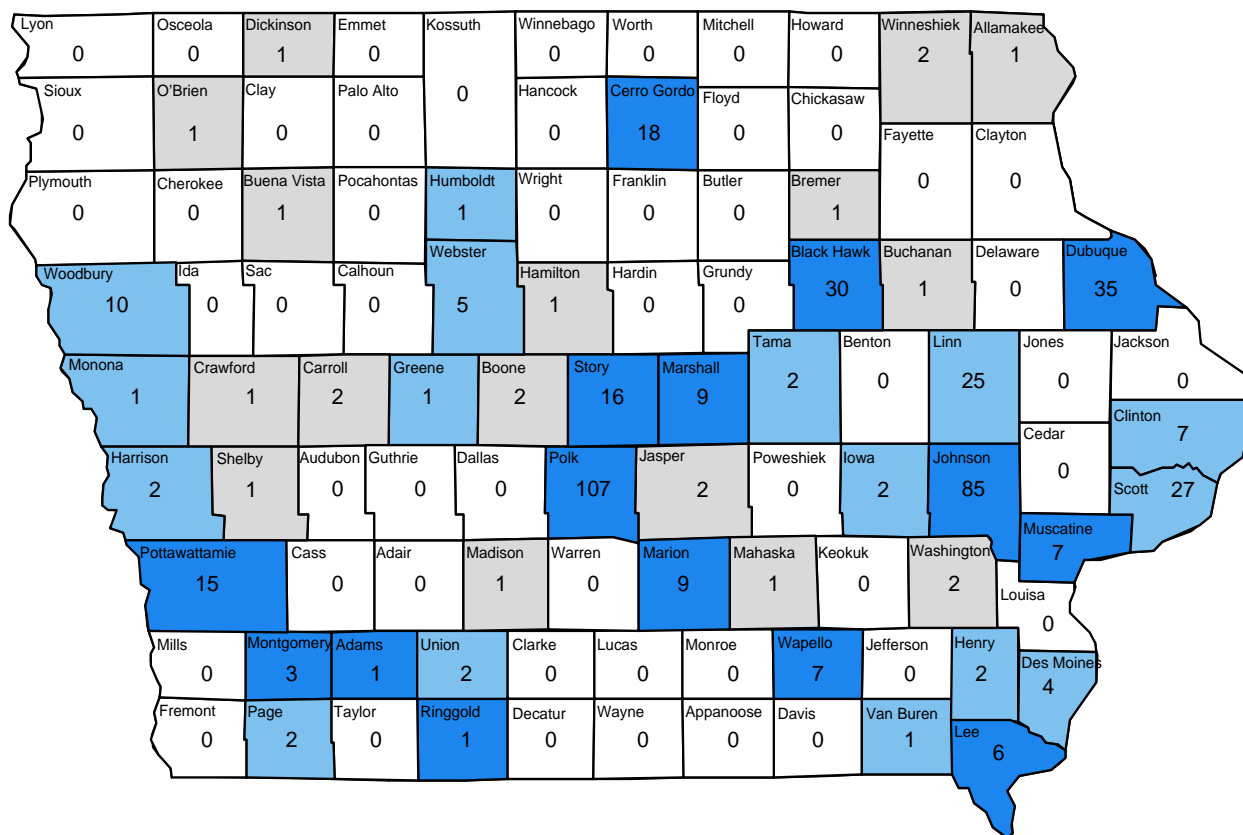
[illegible]

Category	Rate Per 10,000 Population
<10,000	4.5
10,000-20,000	4.6
>20,000	4.2
MSA	4.4
State of Iowa	4.4

170

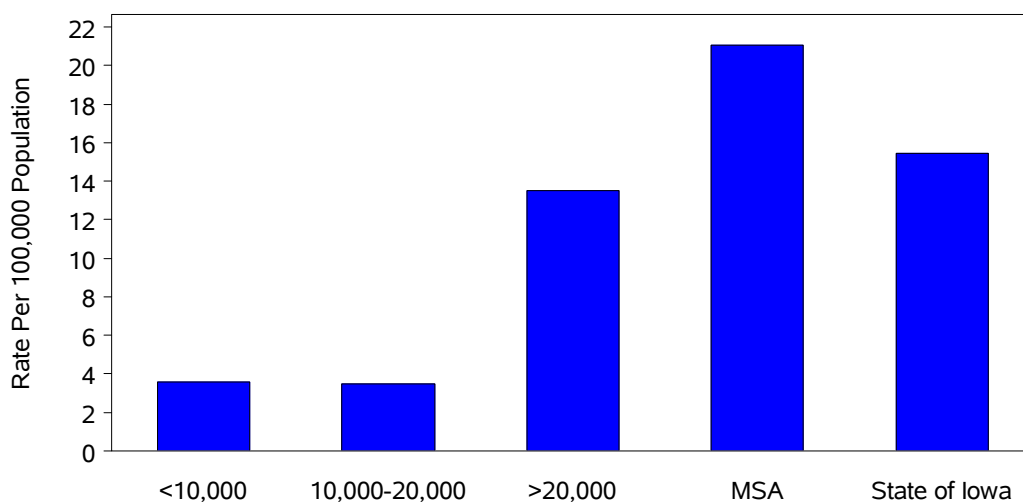
Internal Medicine Physicians

2009 Counts and Crude Rates per 100,000 (shaded)



□ 0 □ 4.2 – 9.6 □ 9.6 – 16.4 ■ 16.4 – 66.4

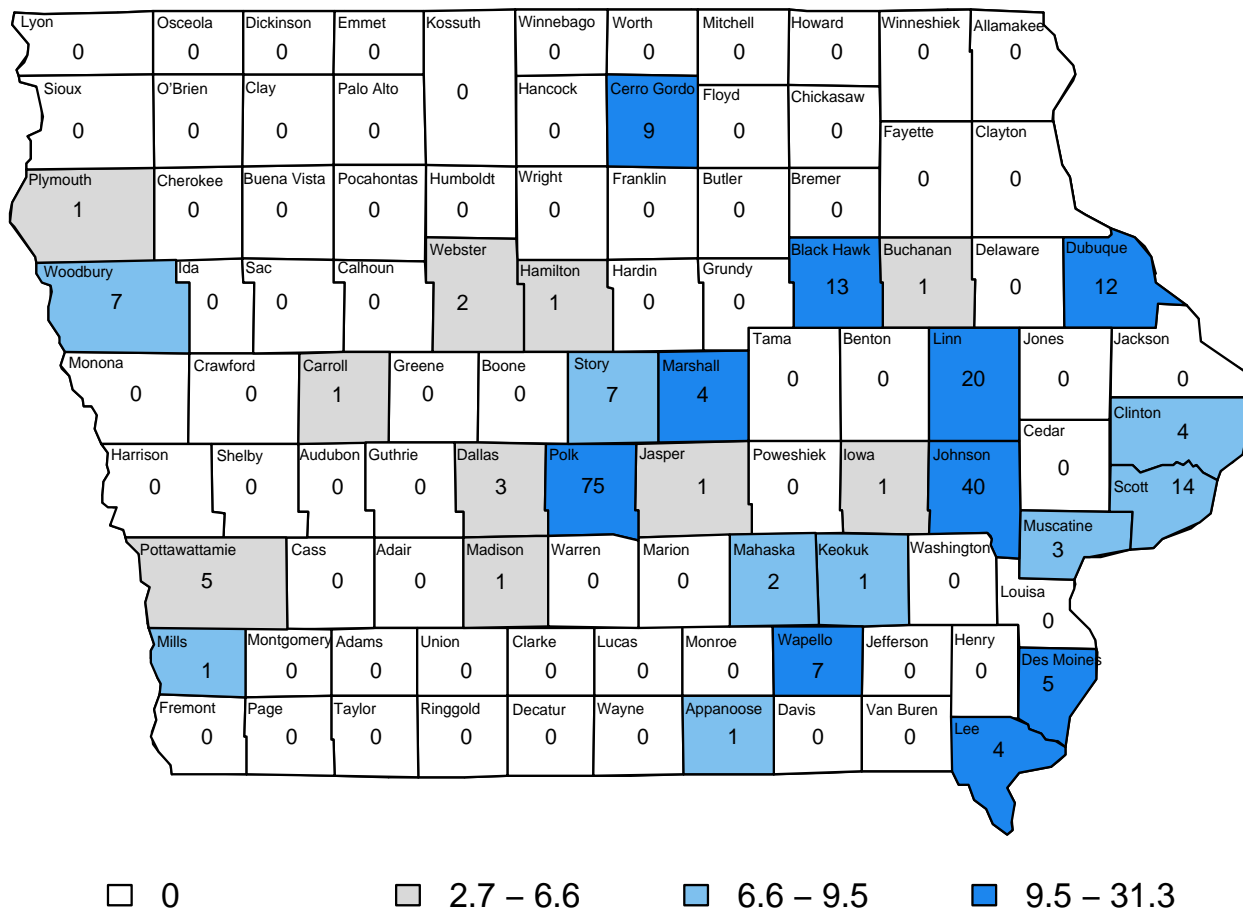
2009 Crude Rates by County Group



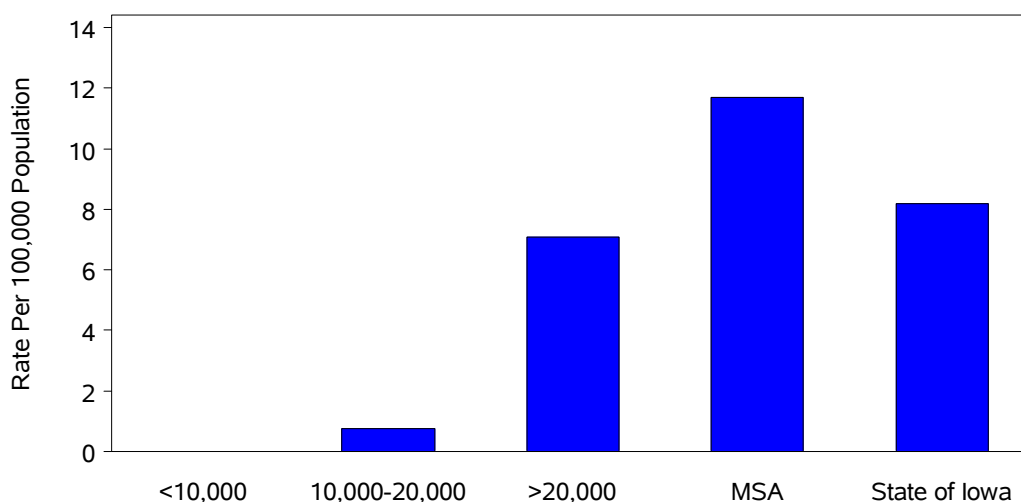
Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

Pediatric Physicians

2009 Counts and Crude Rates per 100,000 (shaded)



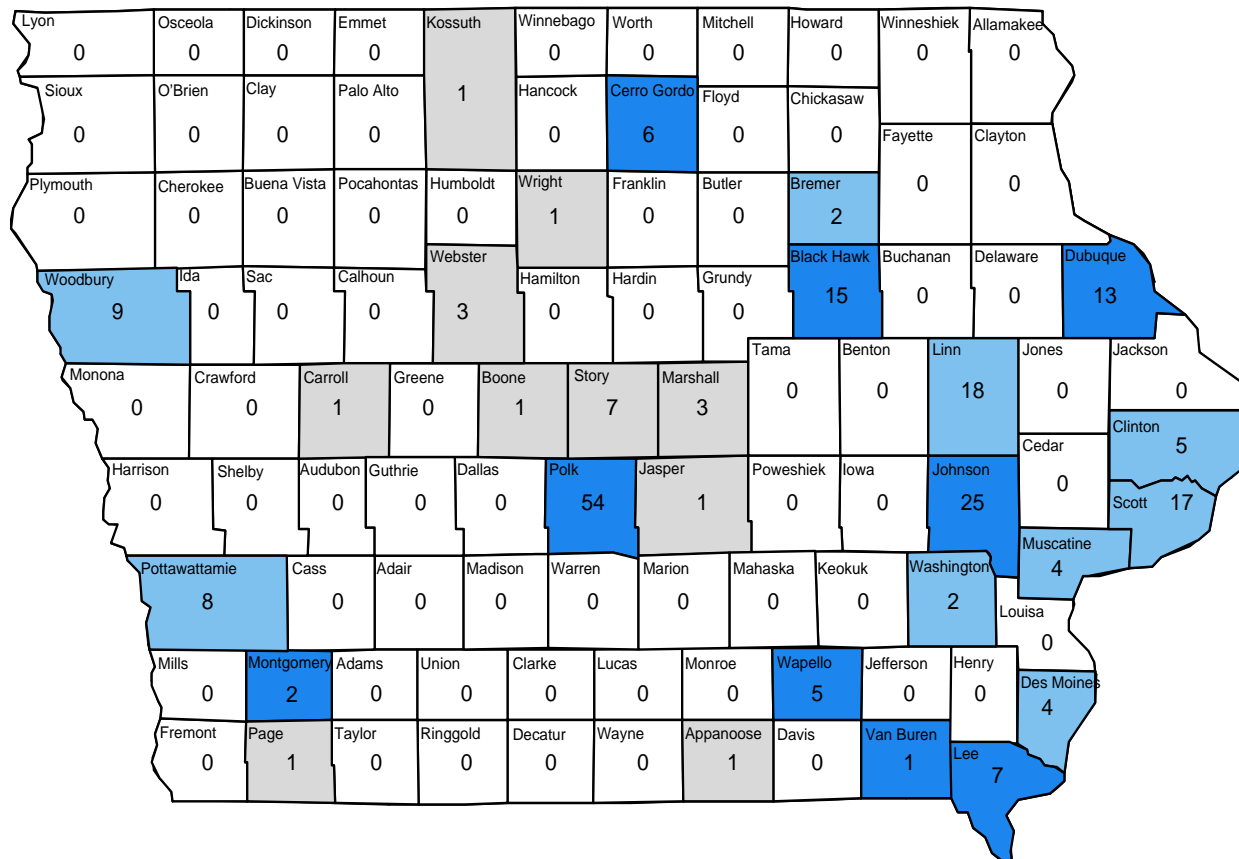
2009 Crude Rates by County Group



Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

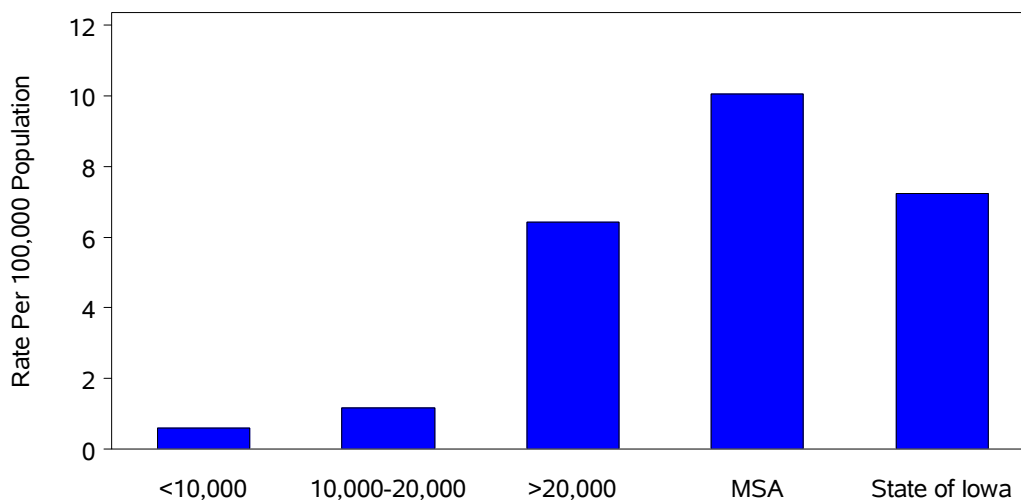
Obstetrics/Gynecology Physicians

2009 Counts and Crude Rates per 100,000 (shaded)

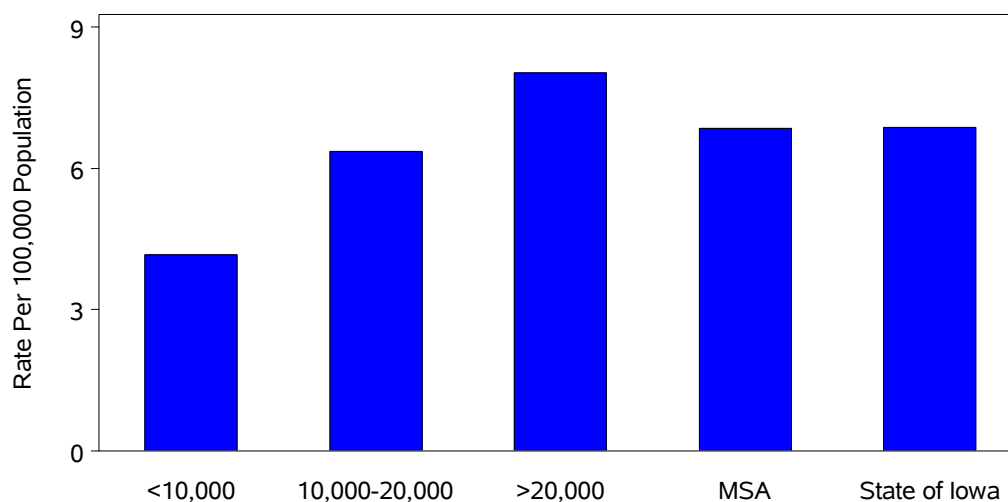
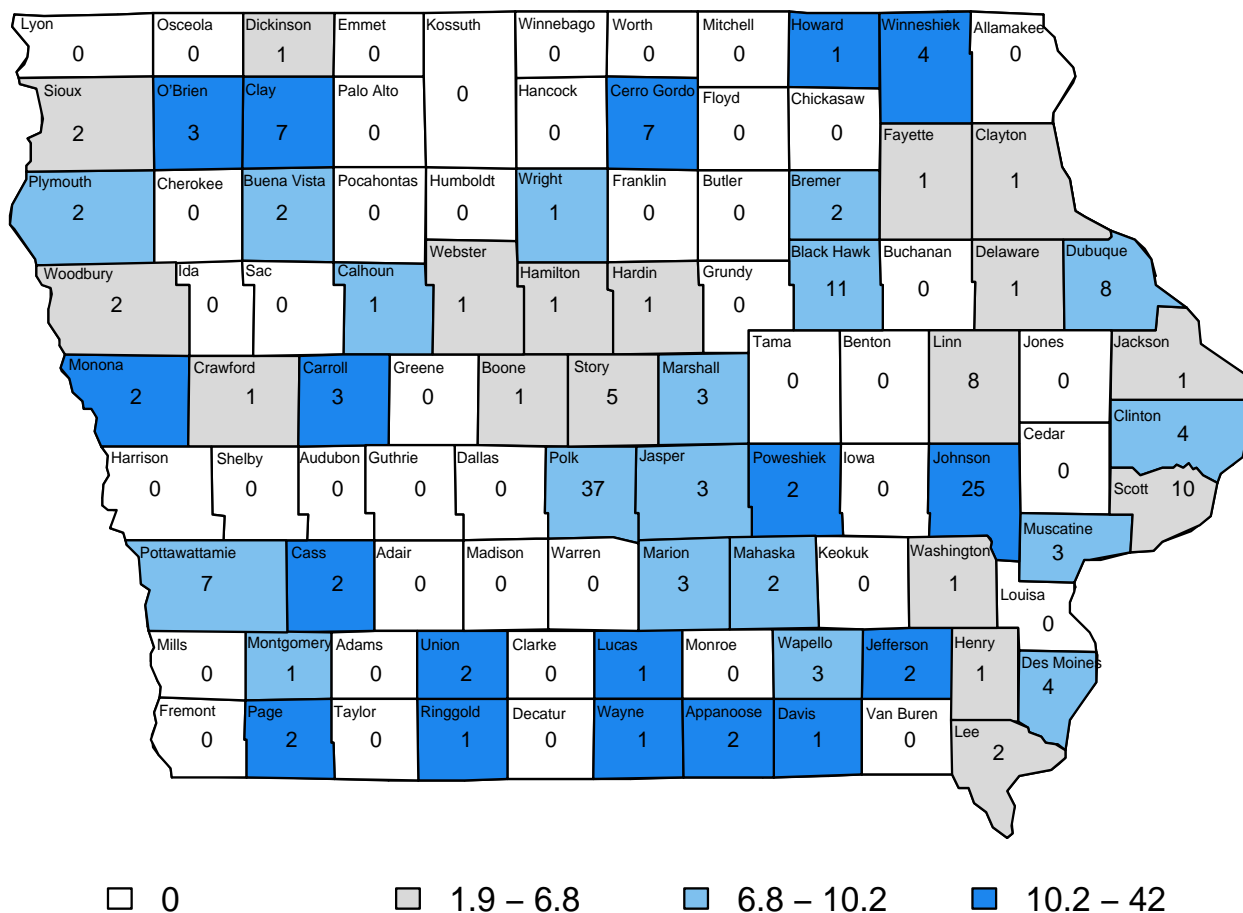


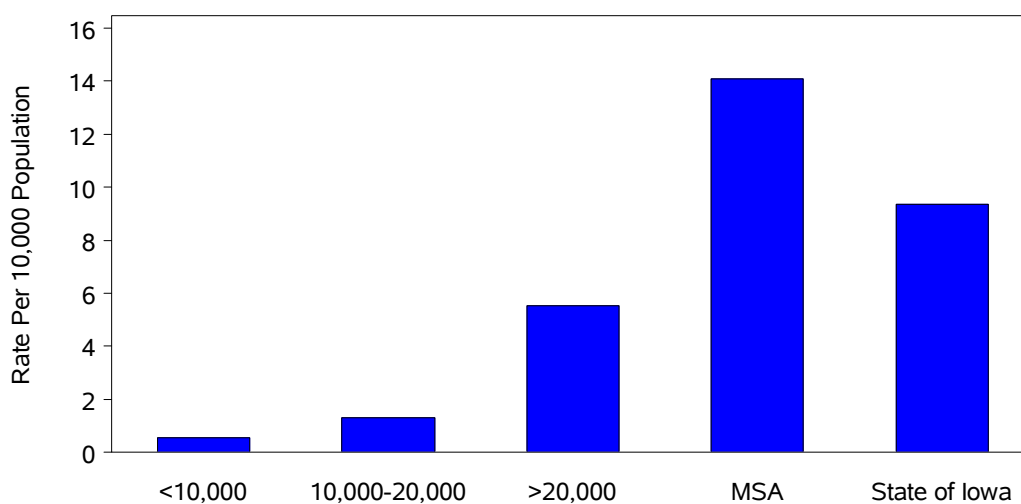
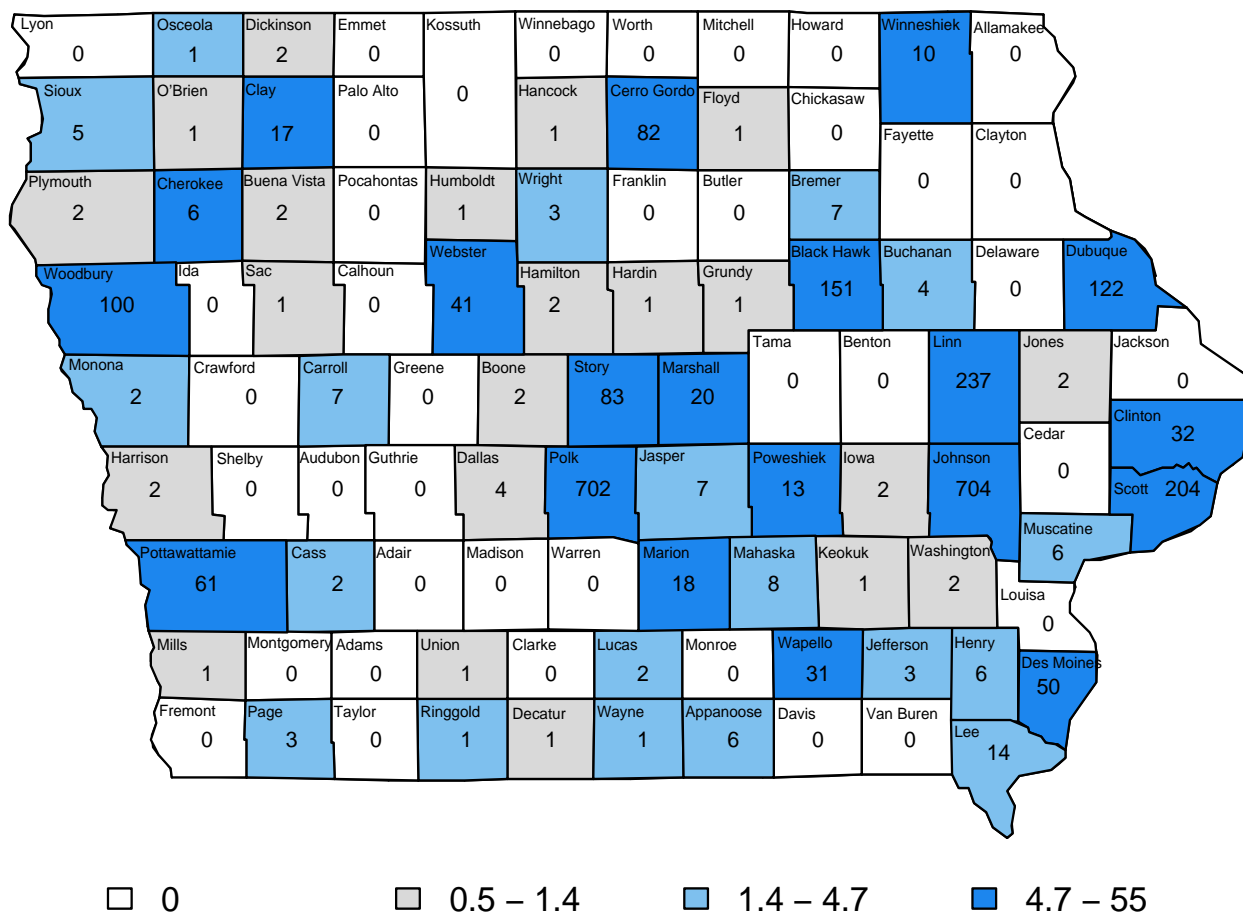
□ 0 □ 2.7 – 8.1 □ 8.1 – 10.4 □ 10.4 – 19.8

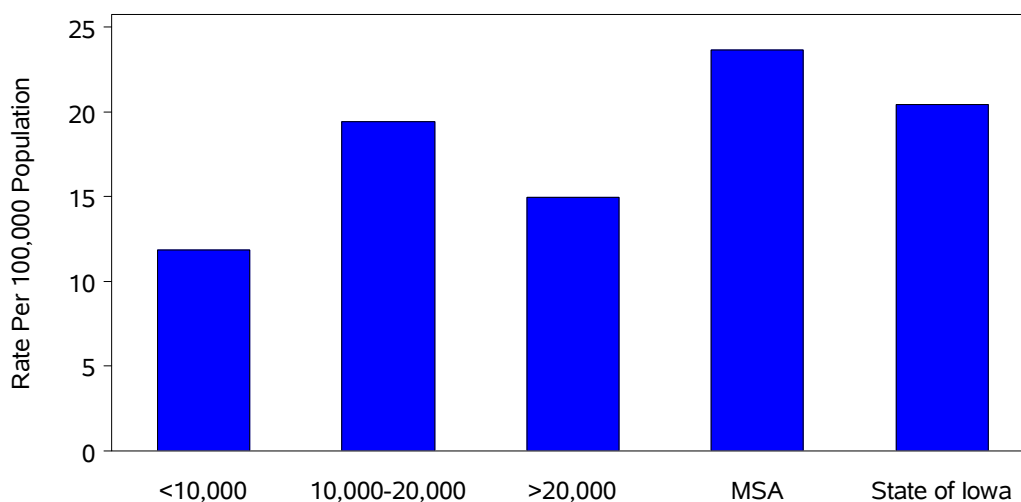
2009 Crude Rates by County Group



Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa



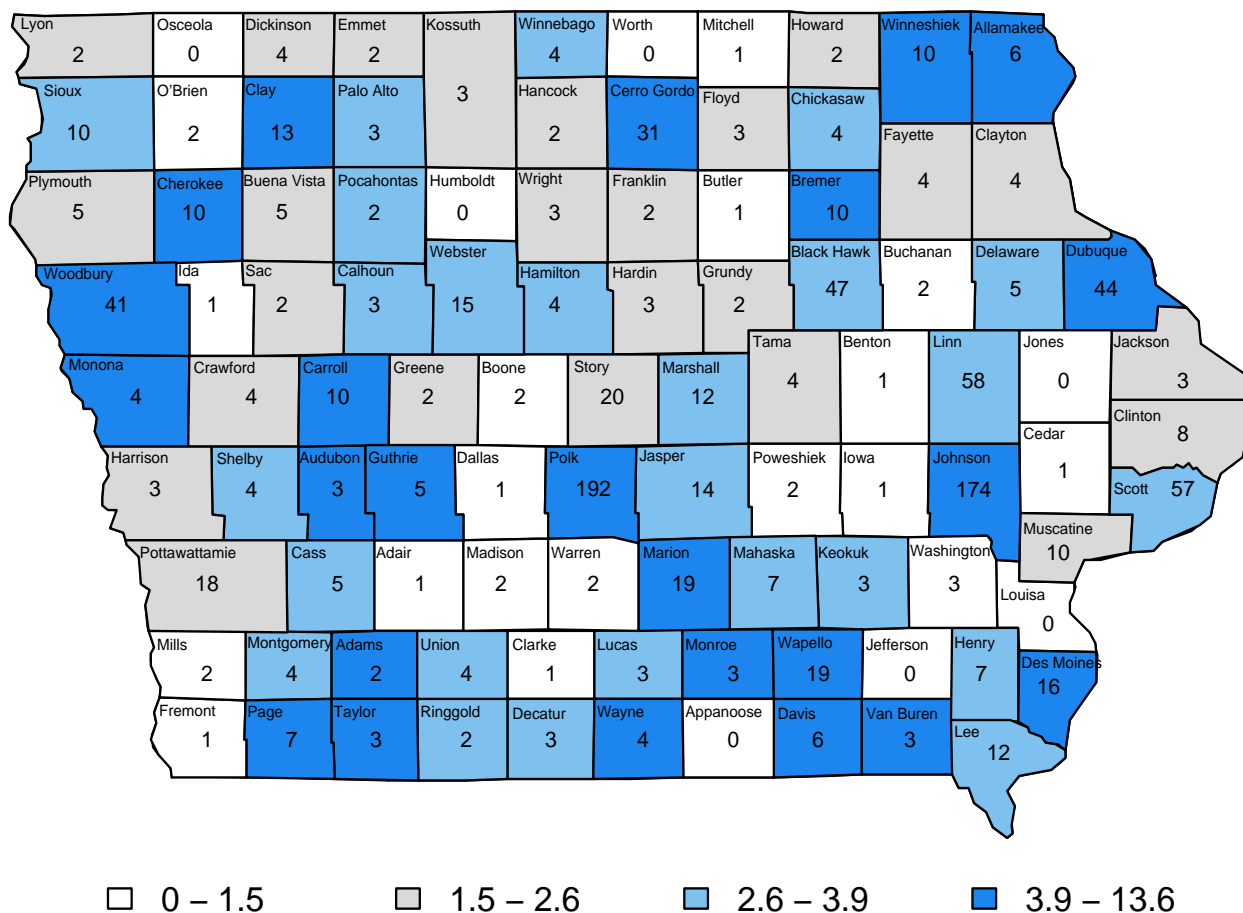


[illegible]

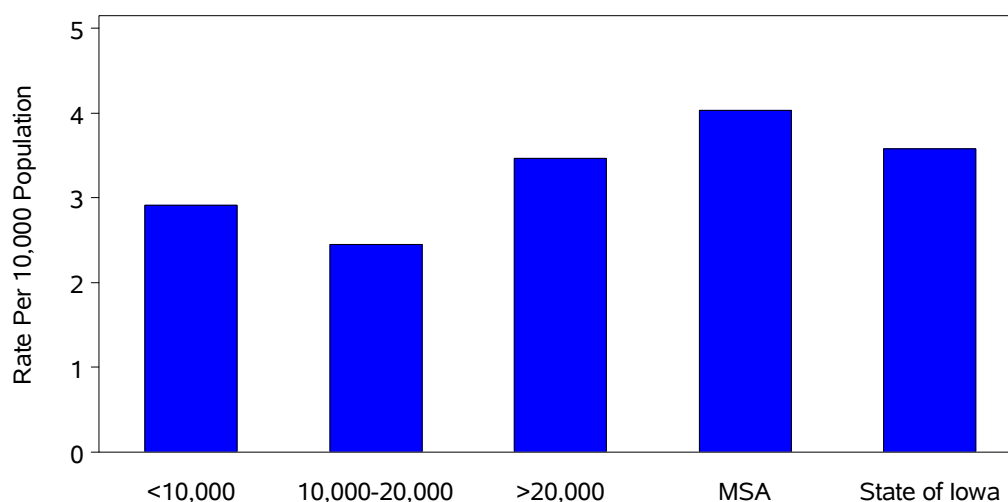
176

Advanced Practical Nurses

2009 Counts and Crude Rates per 10,000 (shaded)



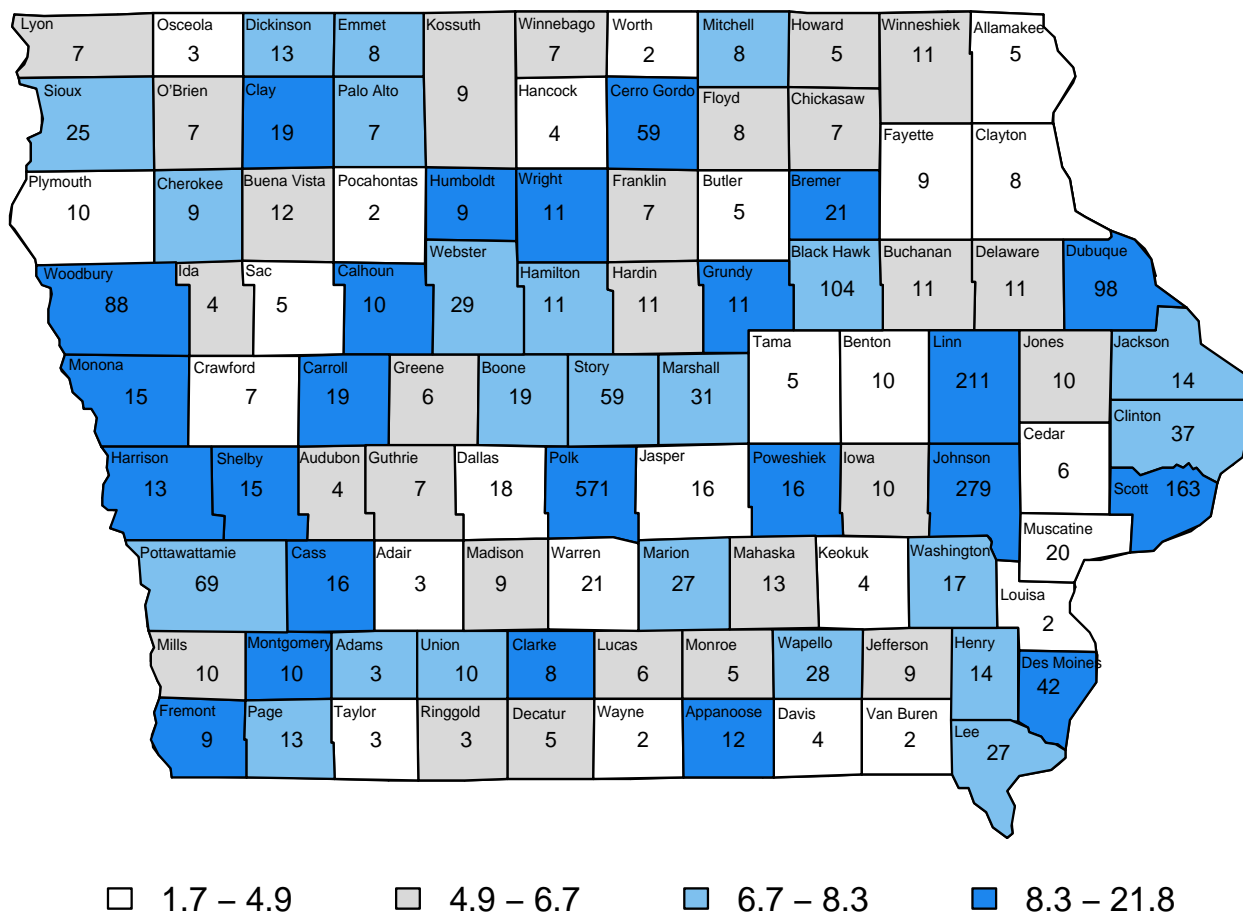
2009 Crude Rates by County Group



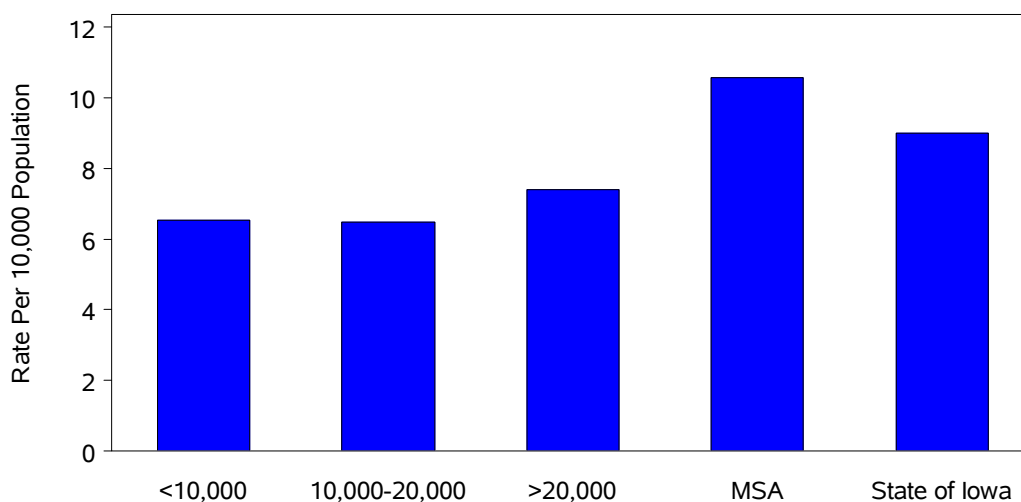
Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

Pharmacists

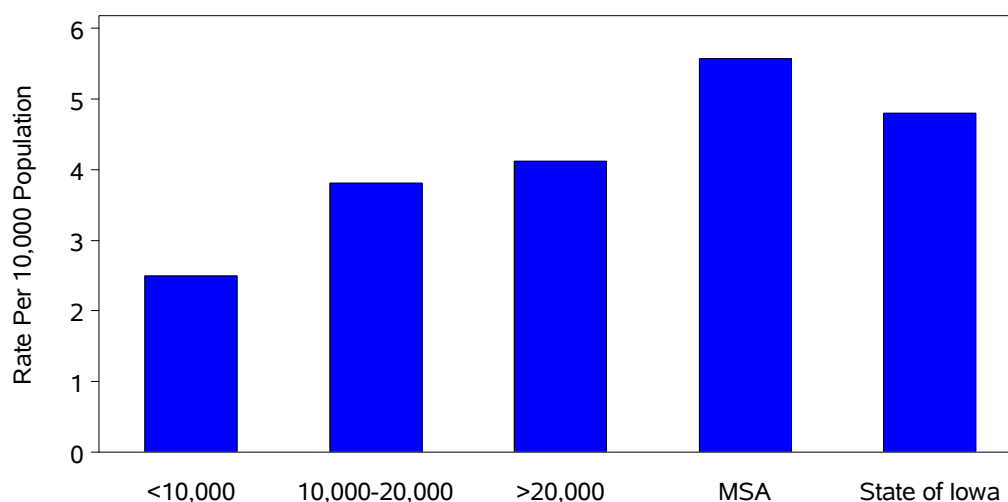
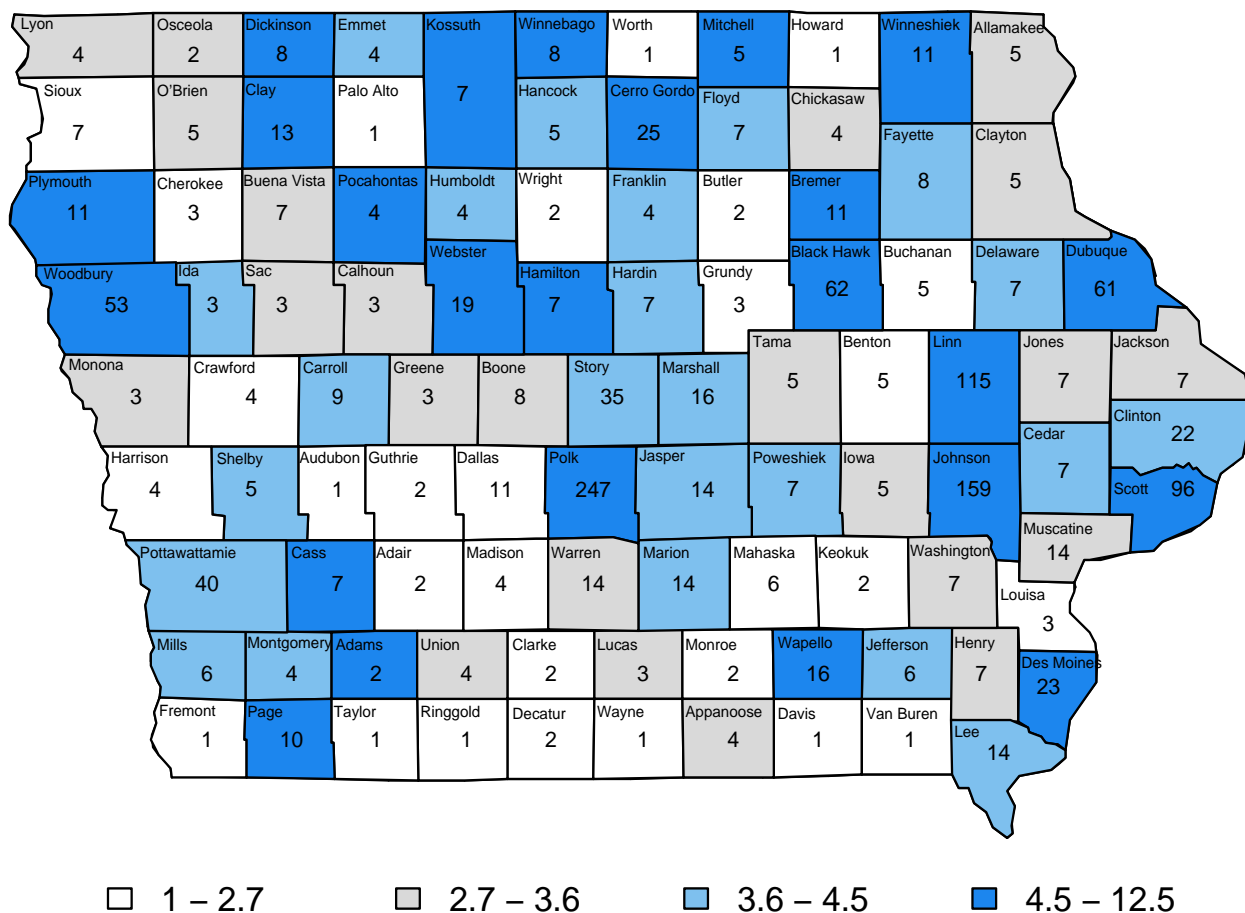
2009 Counts and Crude Rates per 10,000 (shaded)

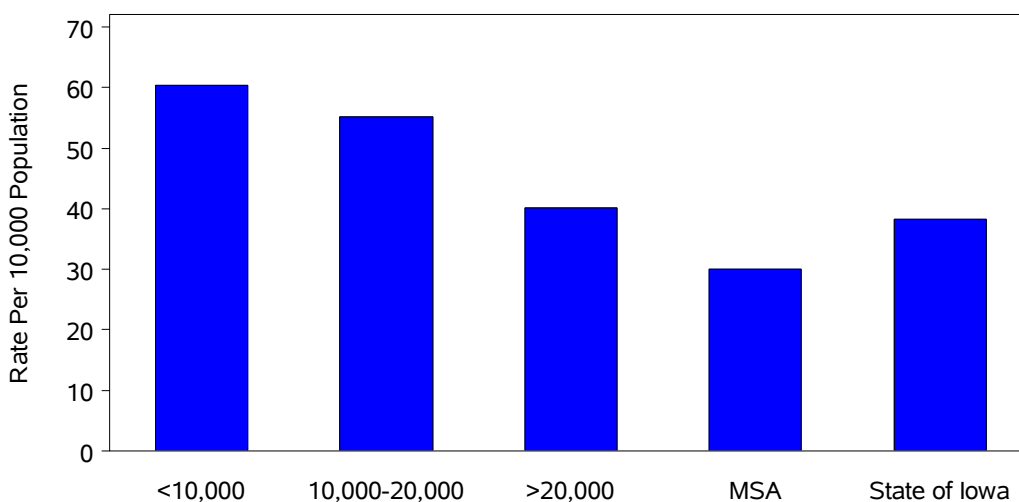
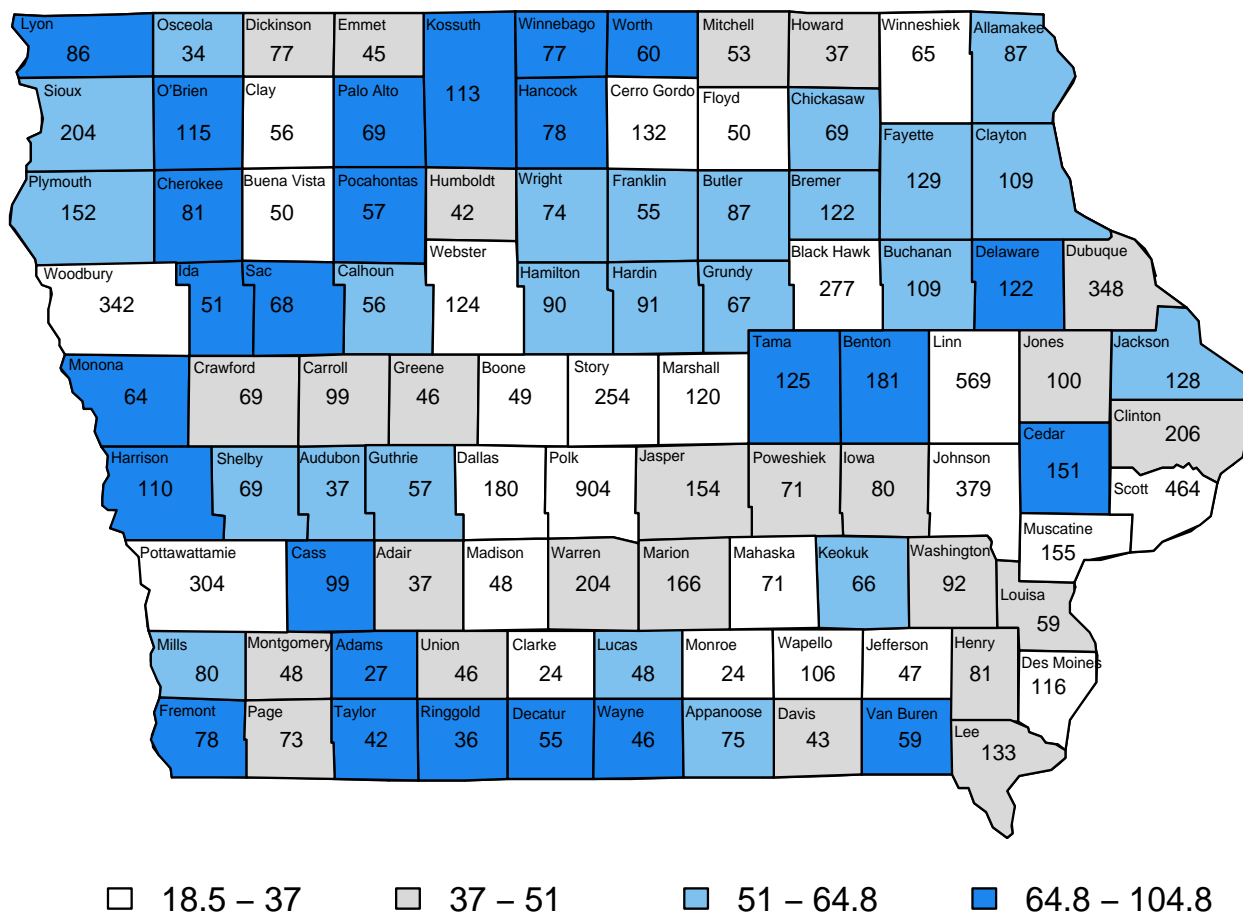


2009 Crude Rates by County Group



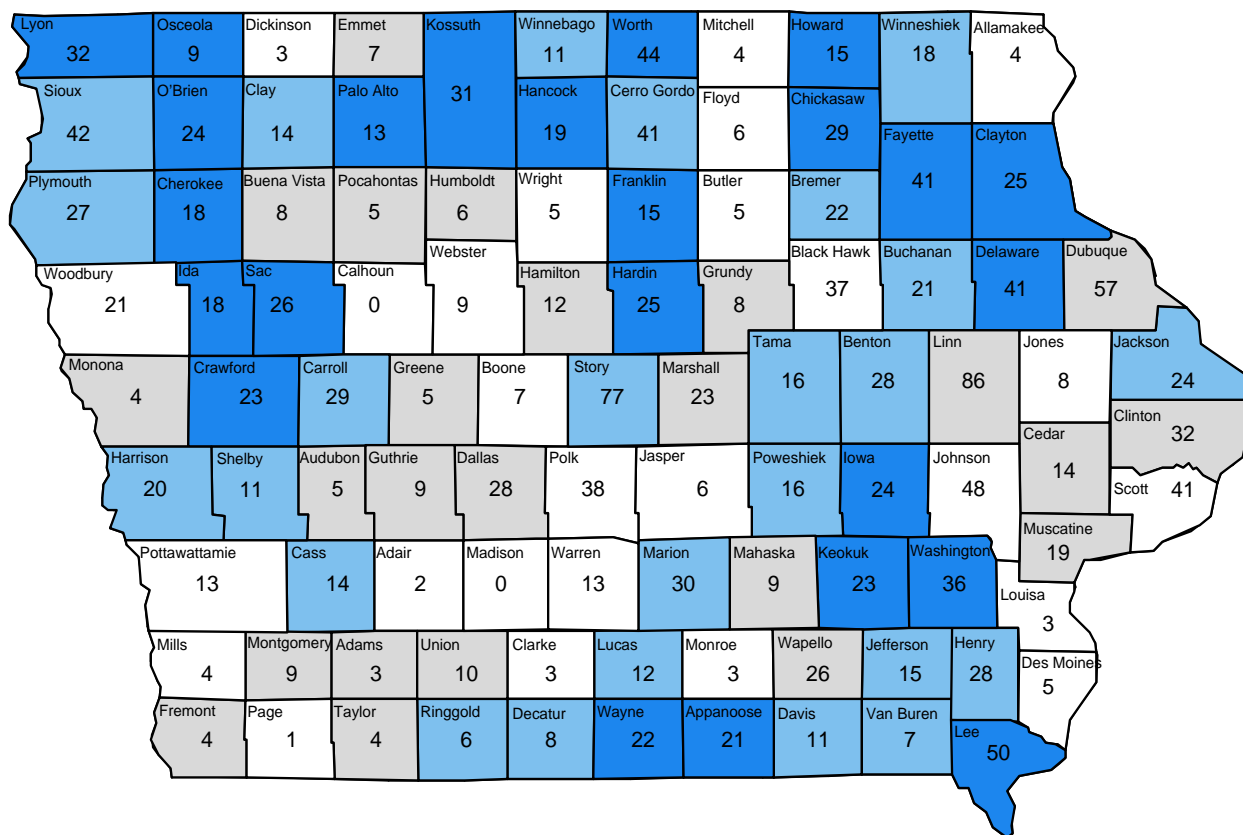
Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa





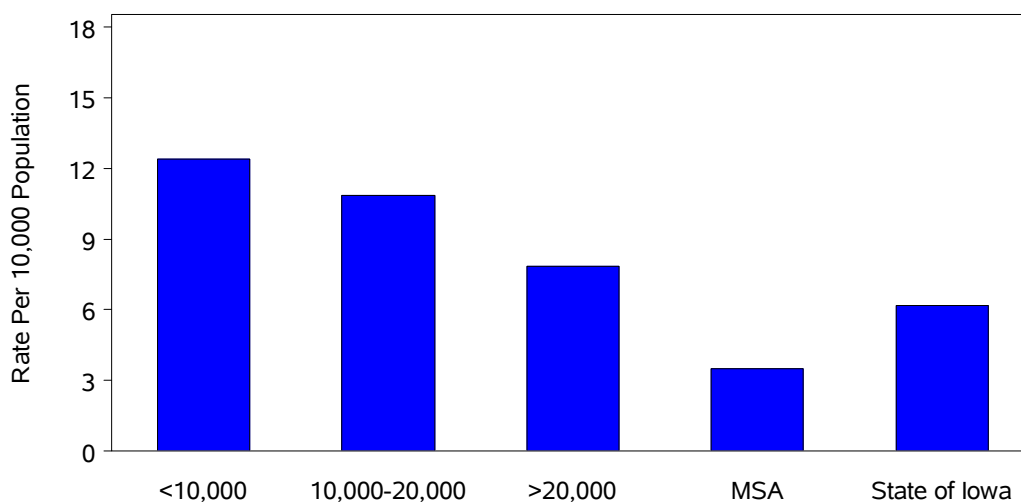
First Responders

2009 Counts and Crude Rates per 10,000 (shaded)



□ 0 – 4 □ 4 – 8.3 □ 8.3 – 13.9 ■ 13.9 – 57.5

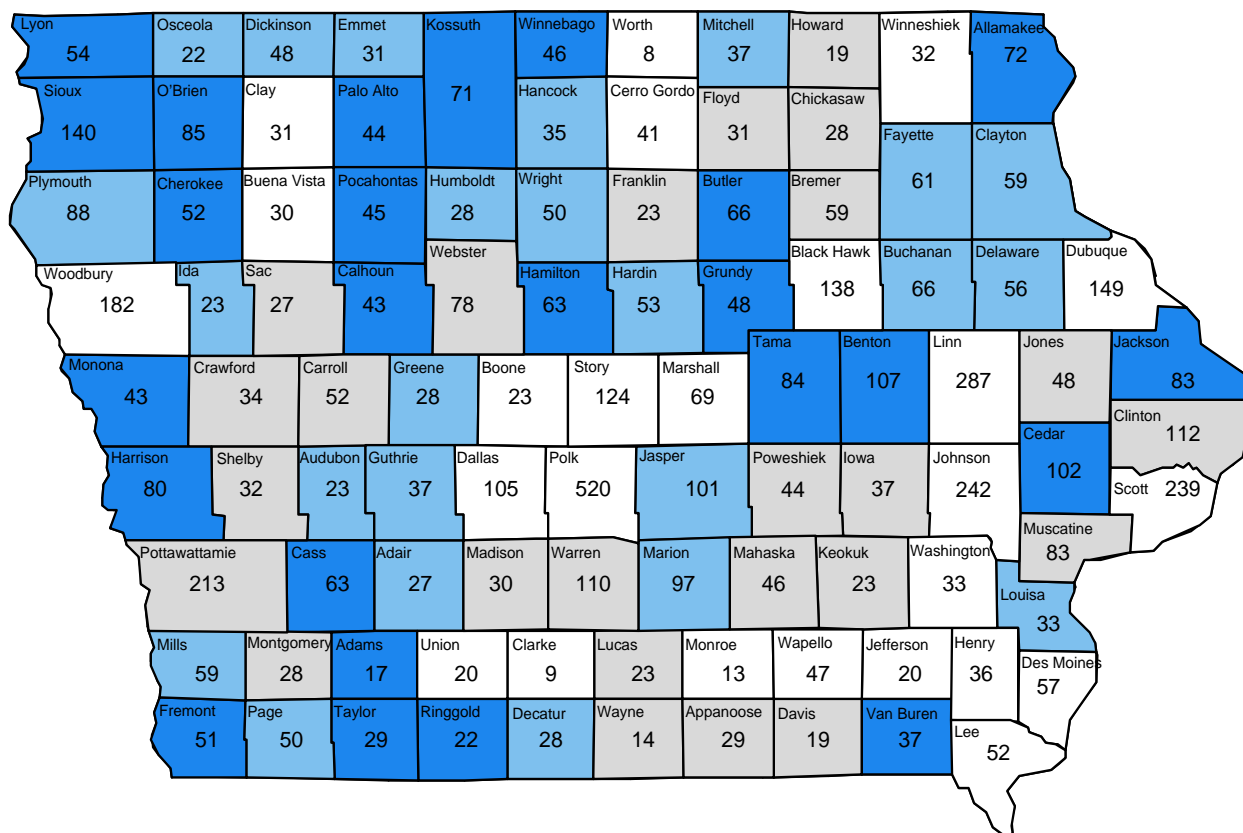
2009 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

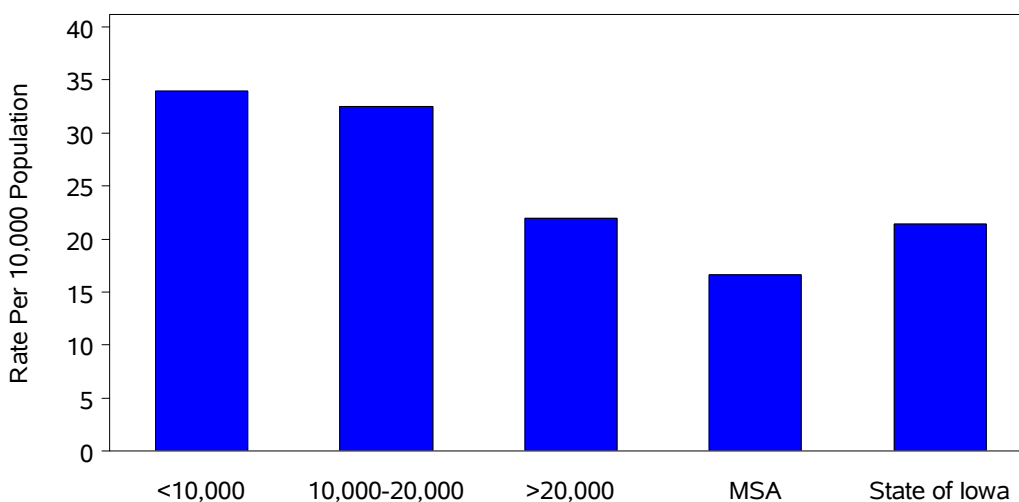
Emergency Medical Technicians – Basic

2009 Counts and Crude Rates per 10,000 (shaded)



□ 8.7 – 19.1 □ 19.1 – 26.4 □ 26.4 – 39.3 ■ 39.3 – 68.5

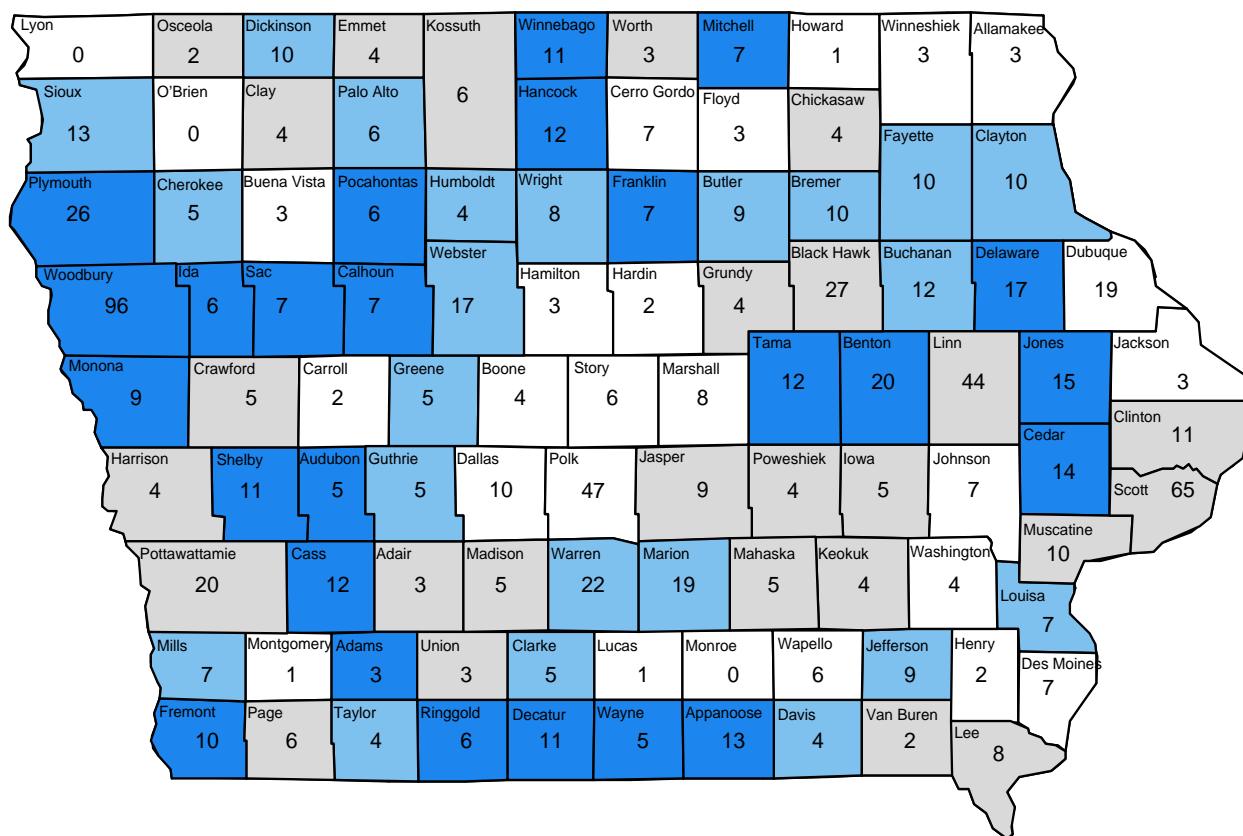
2009 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

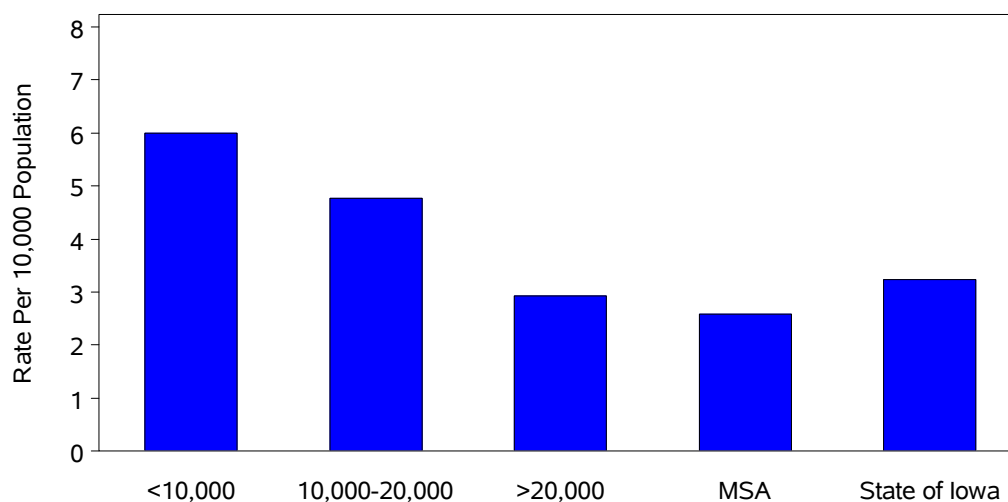
Emergency Medical Technicians – Intermediate

2009 Counts and Crude Rates per 10,000 (shaded)

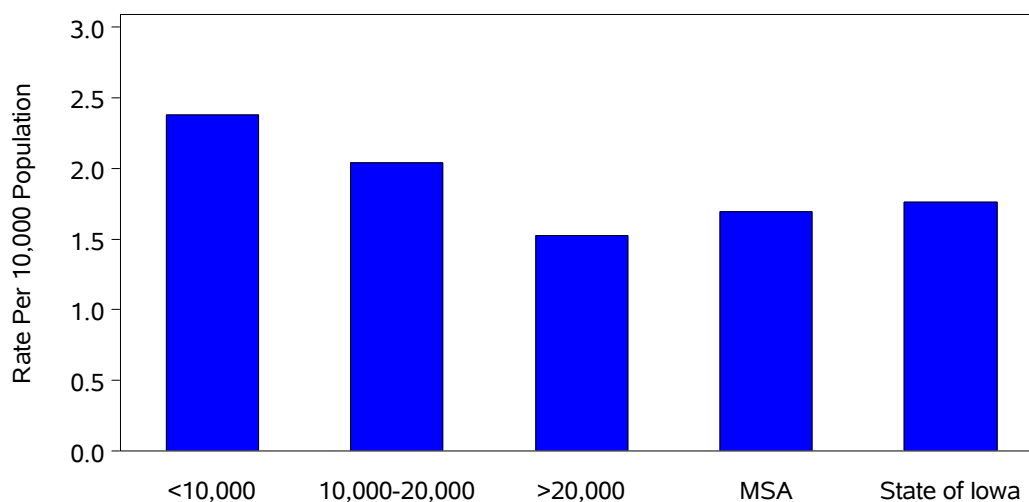
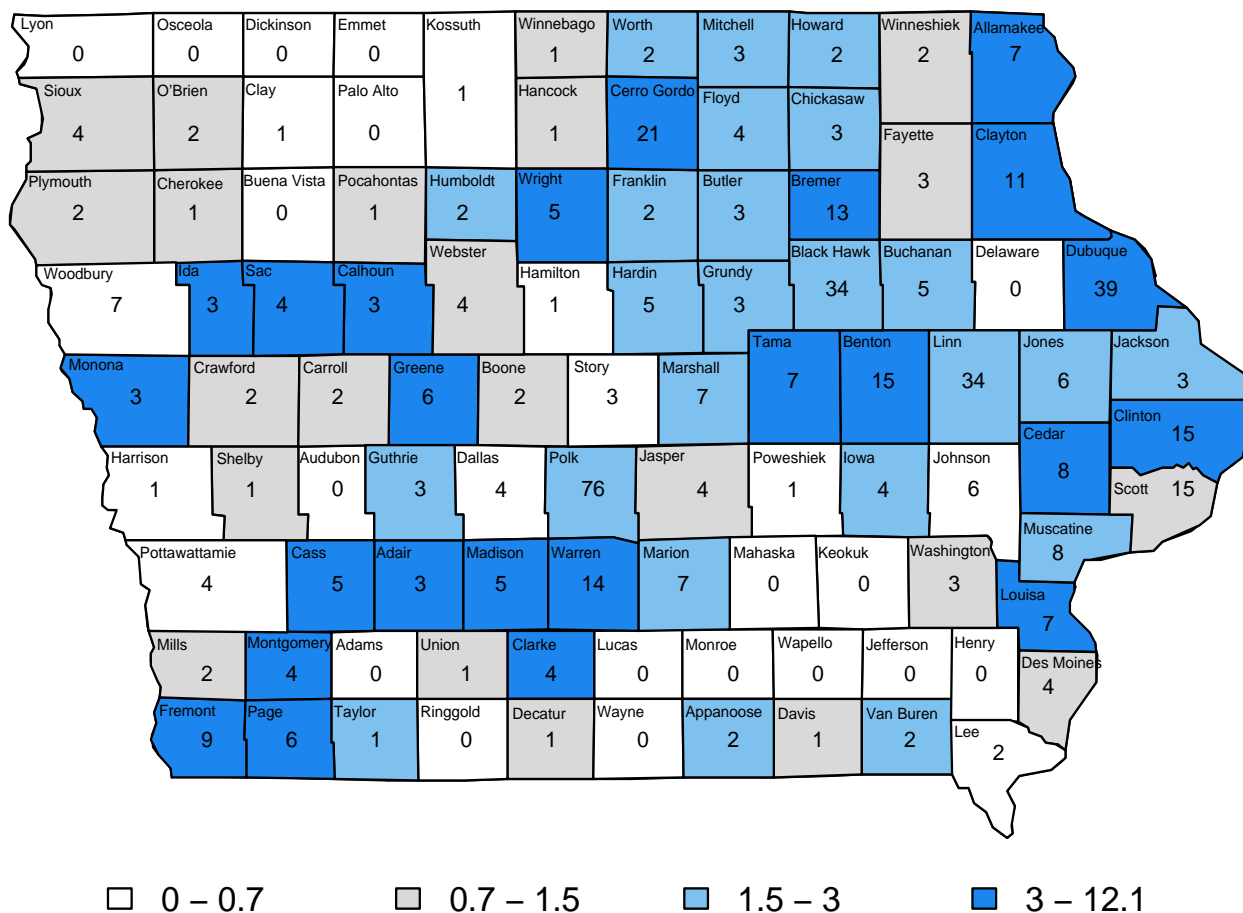


0 – 2.1
 2.1 – 4
 4 – 6.5
 6.5 – 13.5

2009 Crude Rates by County Group

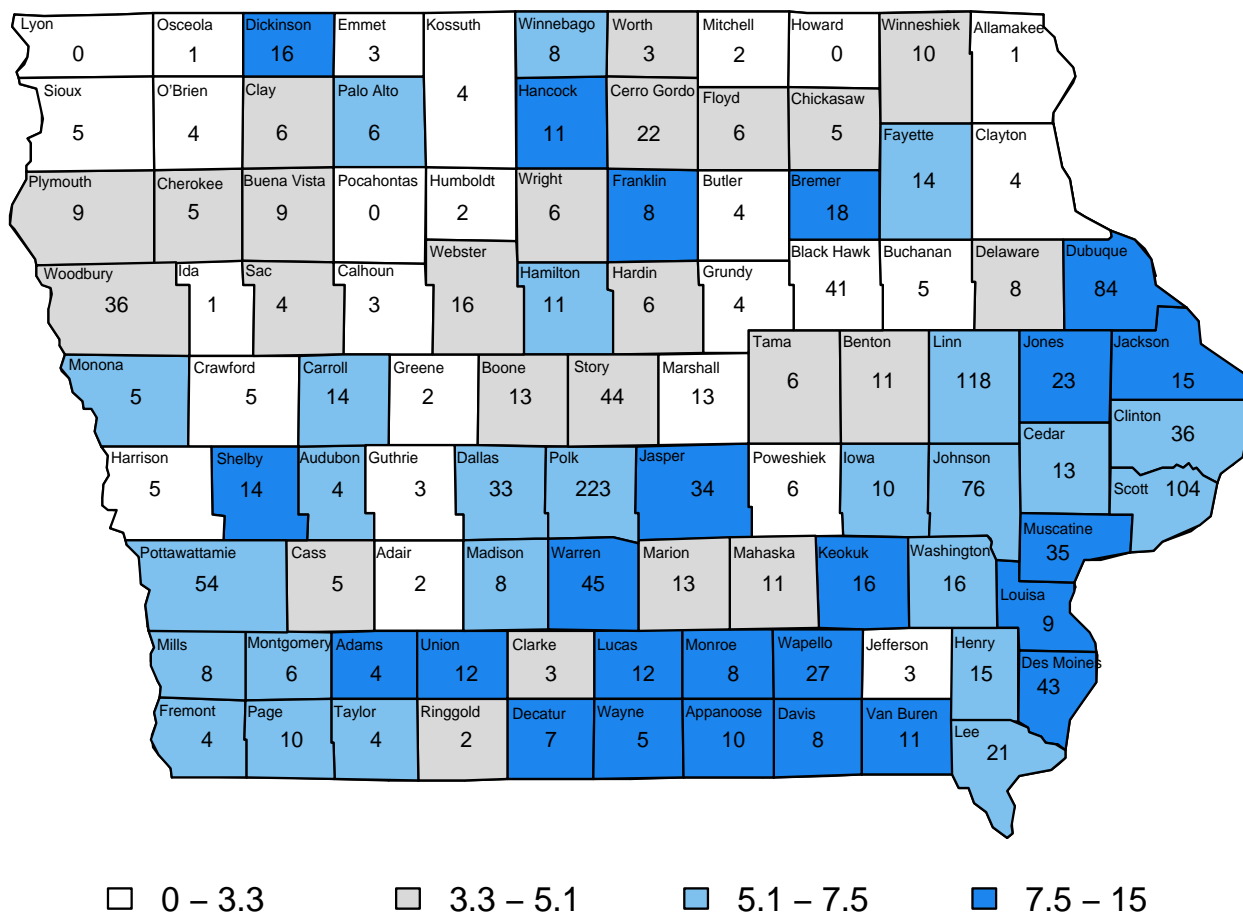


Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

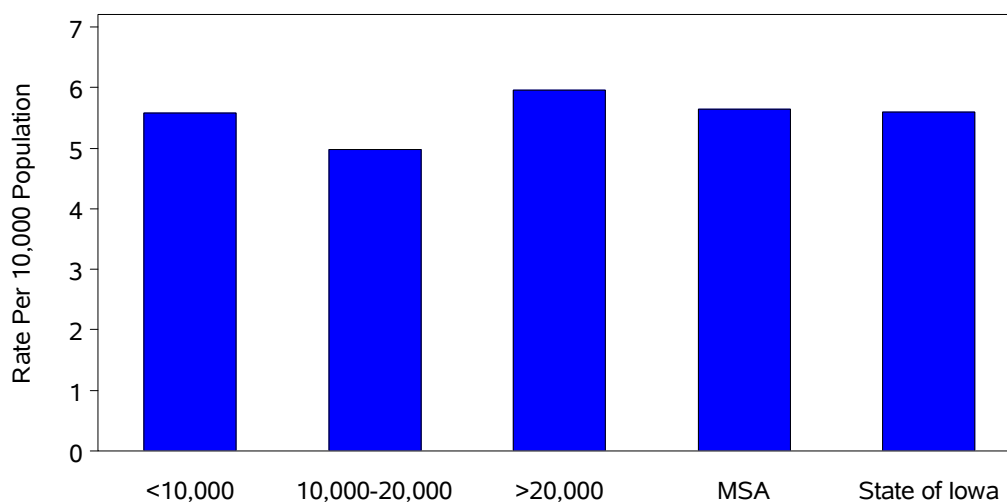


Emergency Medical Technicians – Paramedic Specialists

2009 Counts and Crude Rates per 10,000 (shaded)



2009 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

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Health Care Facilities

The information presented on health care facilities comes from the Division of Health Facilities in the Iowa Department of Inspections and Appeals (DIA). This state agency is responsible for inspection of all Chapter 135C licensed health care facilities in Iowa, including those presented in the 2009 Iowa Health Fact Book. Under state law the DIA is responsible for the inspection and licensure of Hospitals (135B), Birth Centers (135G), Hospices (135J) and Psychiatric Medical Institutes for Children (135H). This agency also conducts inspections of various Medicare/ Medicaid entities (e.g., skilled nursing facilities, home health agencies, hospices, hospitals, CLIA labs, etc.) through contract with the Health Care Financing Administration (HCFA), and investigates complaints of substandard care or services in these entities. Additional information may be accessed through their web site: <http://www.dia-hfd.state.ia.us>.

There is only one Intermediate Care Facility for Persons with Mental Illness in Iowa (a 25-bed unit in Davis County), so statewide data for this type of facility are not presented.

FACILITY TYPES REGULATED BY THE STATE OF IOWA DIVISION OF HEALTH FACILITIES...

Ambulatory Surgical Centers
 Birthing Centers
 Chronic Confusion or Dementing Illness Units
 Community Mental Health Centers
 Comprehensive Out-Patient Rehabilitation Facilities
 Critical Access Hospitals
 End-Stage Renal Disease Facilities
 Home Health Agencies
 Hospices
 Hospital Based (Distinct-Part) Nursing Facility Units
 (Covered by Medicaid)
 Hospital Based (Distinct-Part) Skilled Nursing Facility
 Units (Covered by Medicaid)
 Hospital Based (Distinct-Part) Skilled Nursing
 Facility/Nursing Facility Units (Covered by
 Medicaid)
 Hospital Based Intermediate Care Facilities for the
 Mentally Retarded (Covered by Medicaid)
 Hospitals
 Hospitals with Psychiatric Units excluded under the
 Medicare Prospective Payment System
 Hospitals with Swing-Beds
 Intermediate Care Facilities for Persons with Mental
 Illness
 Intermediate Care Facilities for the Mentally Retarded
 Laboratories Covered under the (Federal) Clinical
 Laboratories Improvement Amendments 1988
 (CLIA '88)
 Nursing Facilities
 Organ Procurement Organizations
 Portable X-Ray Service Suppliers
 Psychiatric Medical Institutions for Children
 Rehabilitation Agencies with Out-Patient Physical
 Therapy/Out-Patient speech Pathology/Out-
 Patient Occupational Therapy Providers
 Residential Care Facilities
 Residential Care Facilities for Persons with Mental
 Illness
 Residential Care Facilities for the Mentally Retarded
 Rural Health Clinics
 Specialized 3-5 Bed Facilities

Community and Migrant Health Centers

Community and migrant health centers provide affordable, accessible, and acceptable primary health care to Iowans. These centers primarily serve indigent, medically-underserved, and under-insured populations and assist special populations through grants and programs.

Community and migrant health centers are the safety net providers. They provide several health services to the community, including comprehensive health services with a variety of physician specialties, general dentistry and community health programs involving oral health education and dental screening, prenatal care, family planning, health screenings, immunizations, case management, and pharmacies. Centers may be affiliated with a regional health system that can provide access to substantial support systems.

Community Health Centers (CHCs) are funded by Section 330 funds of the Public Health Service Act. Iowa has 12 such centers with a broad network of satellite centers. Under a state incubator program, another center services patients. CHCs are required to provide primary health services, dental services, mental health services, prevention, education, and case management. Patients cannot be turned away on the basis of ability to pay. A sliding fee scale based on income is mandated. The C/MHC model is a non-profit corporation whose board members must be members of the community and at least one percent of the board must be patients of the health center. Further information on Community Health Centers can be obtained from the Iowa/Nebraska Primary Care Association (IA/NEPCA) at the web site www.ianepca.com.

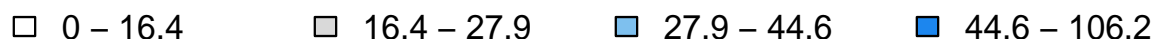
Certified Rural Health Clinics

A rural health clinic is a clinic located in a rural area designated as a shortage area for personal health service and/or primary medical care manpower. In 2009, there were 142 certified rural health clinics in small communities (Iowa Department of Inspections and Appeals), located in 59 of our 99 counties. Such a clinic is neither a rehabilitation agency nor a facility primarily for the care and treatment of mental diseases. Patient services are furnished by a physician's assistant or nurse practitioner at least 50 percent of the time the clinic operates. The definition of such is found in Title 42 in the Code of Federal Regulations. Rural Health Clinics receive enhanced reimbursement for Medicare.

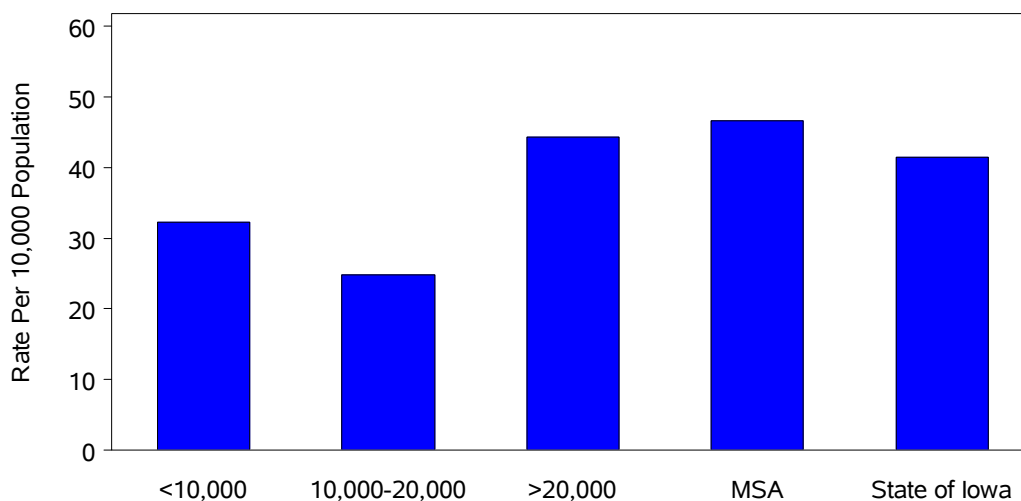
Hospitals



Hospital Beds



2009 Crude Rates by County Group

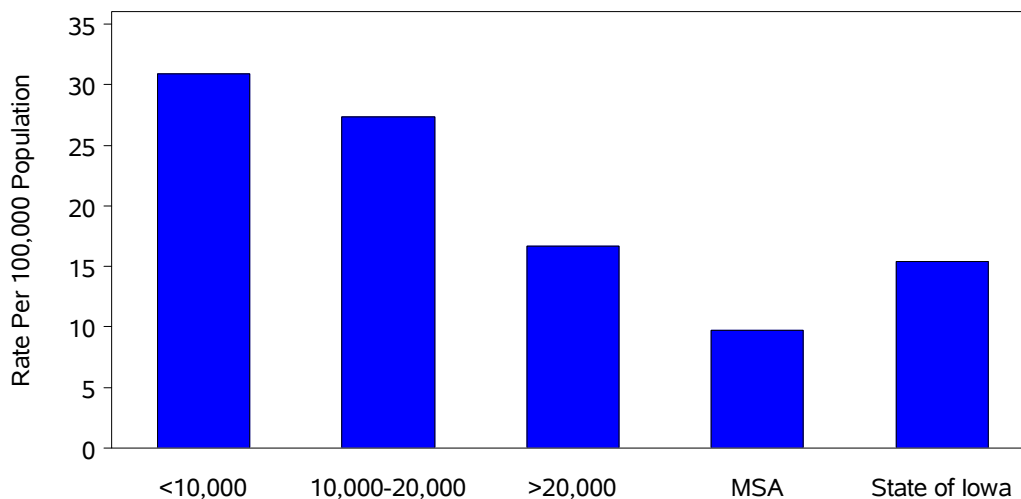


Source: Department of Inspections and Appeals, Iowa Department of Public Health

Nursing Facilities



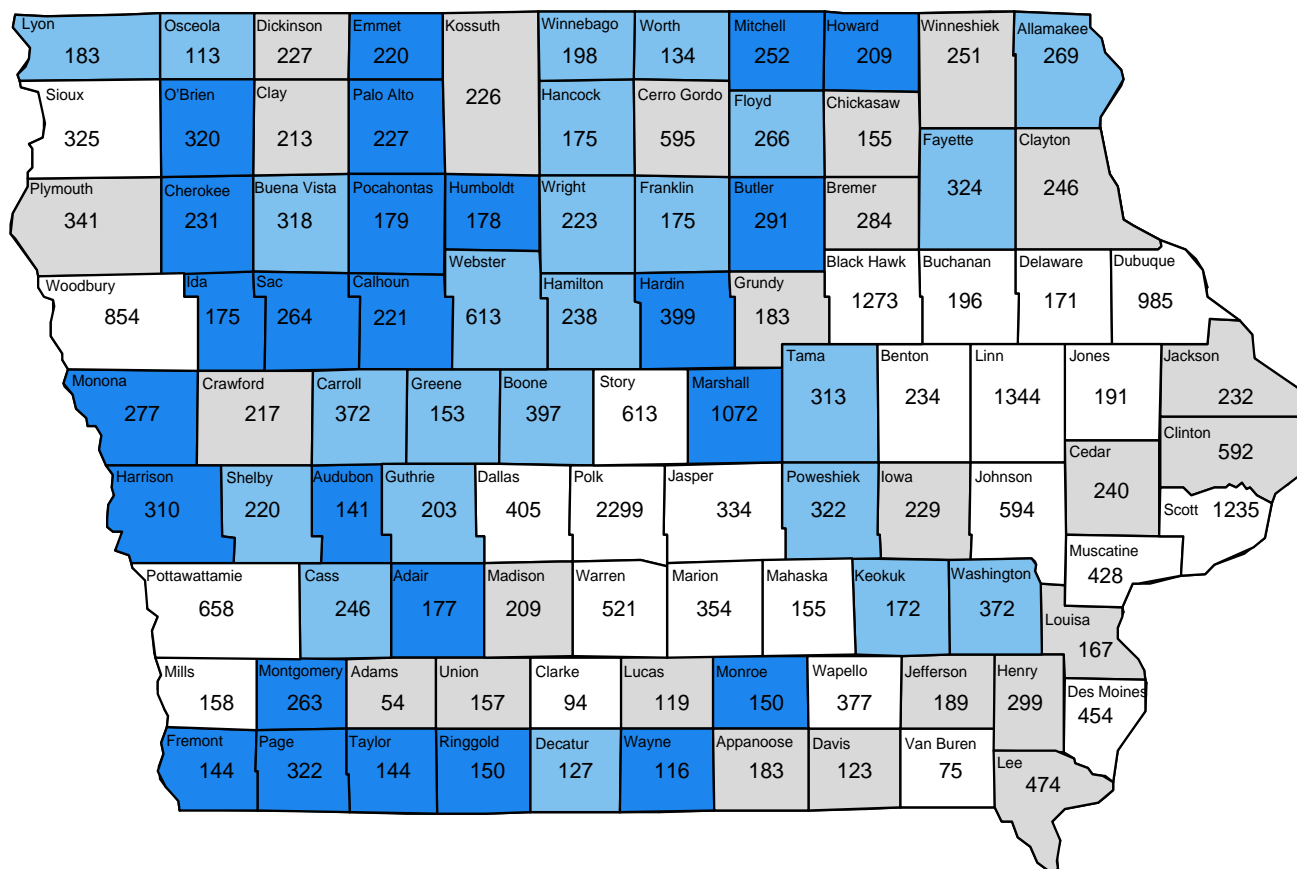
2009 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

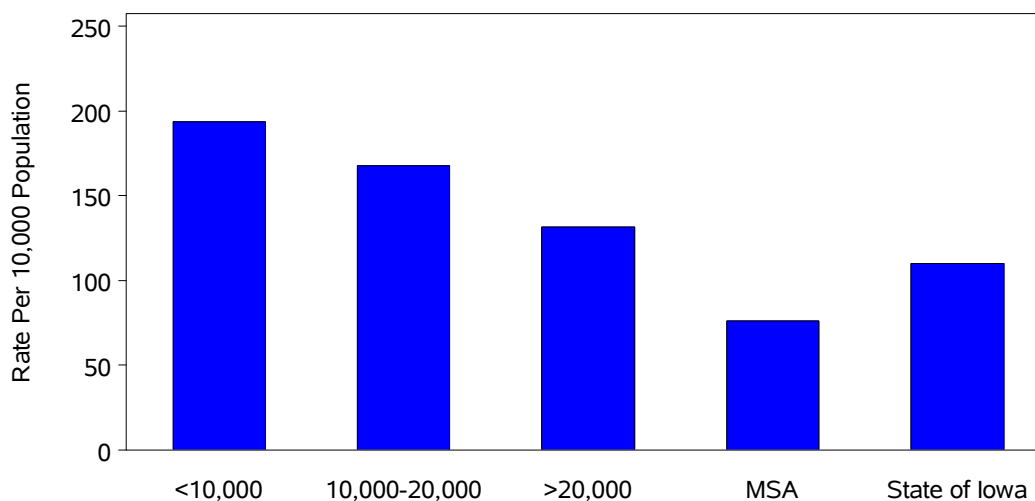
Nursing Facility Beds

2009 Counts and Crude Rates per 10,000 (shaded)



□ 46.3– 116 □ 116– 150.3 ■ 150.3– 185.4 ■ 185.4– 309

2009 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

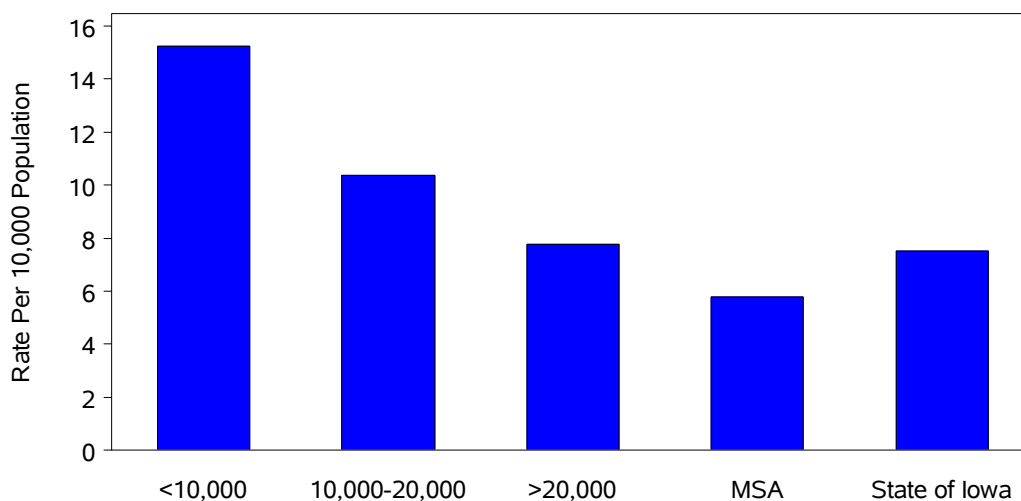
Chronic Confusion or Dementing Illness Units



Beds in Chronic Confusion or Dementing Illness Units



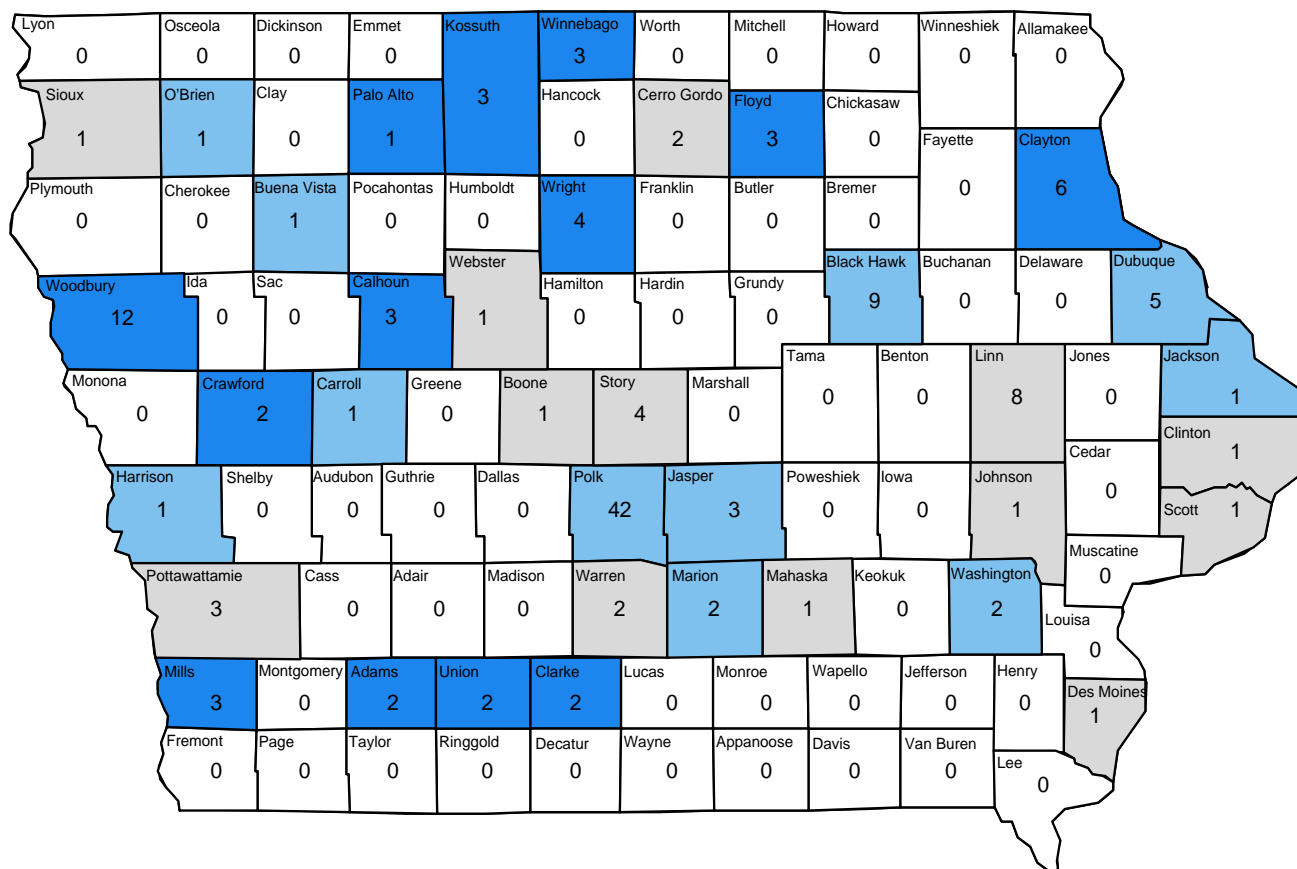
2009 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

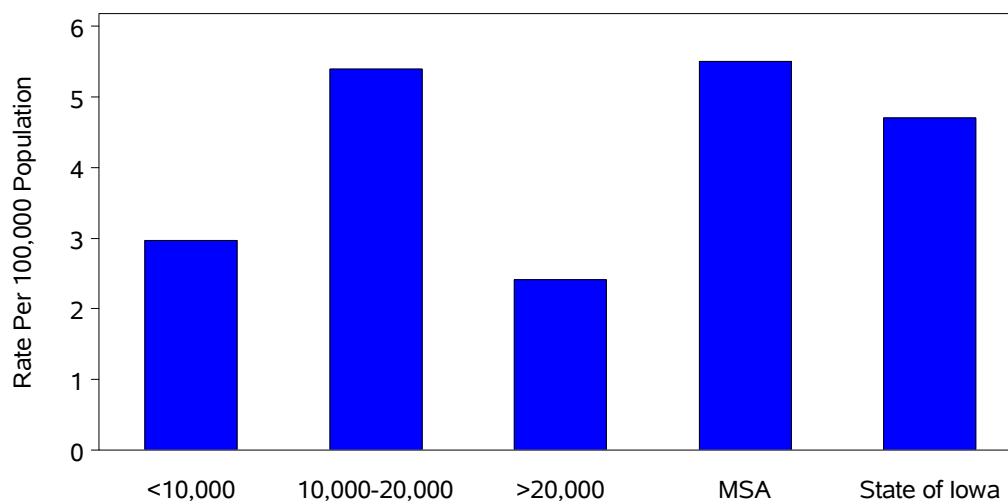
Intermediate Care Facilities for the Mentally Retarded

2009 Counts and Crude Rates per 100,000 (shaded)



□ 0 □ 0.6–4.7 □ 4.7–10.6 □ 10.6–49.6

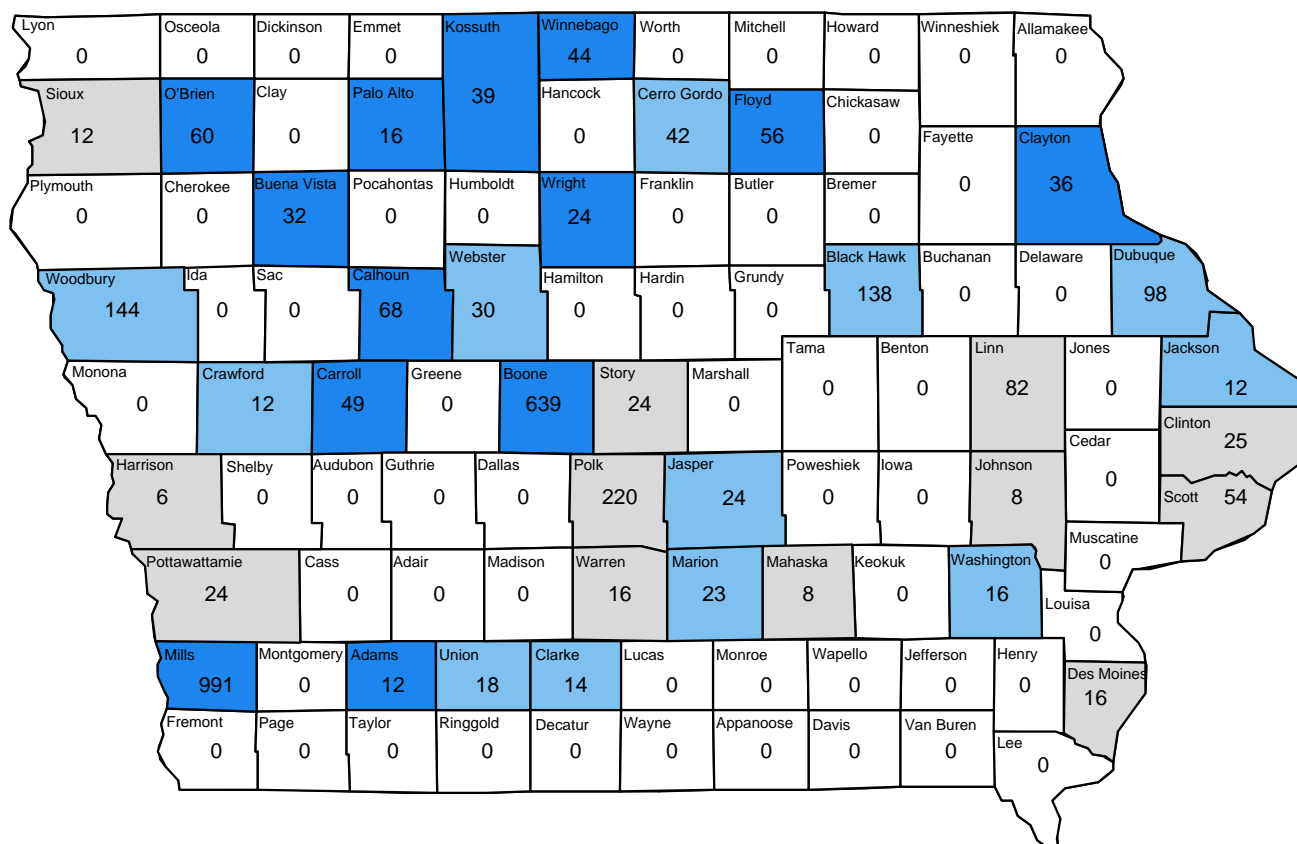
2009 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

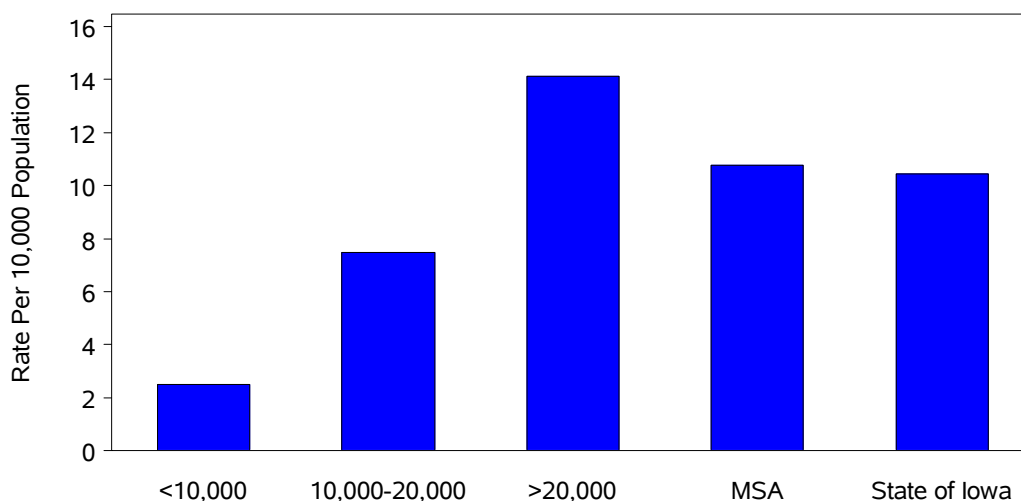
Intermediate Care Beds for the Mentally Retarded

2009 Counts and Crude Rates per 10,000 (shaded)



□ 0 □ 0.6–6 □ 6–16.1 □ 16.1–655.8

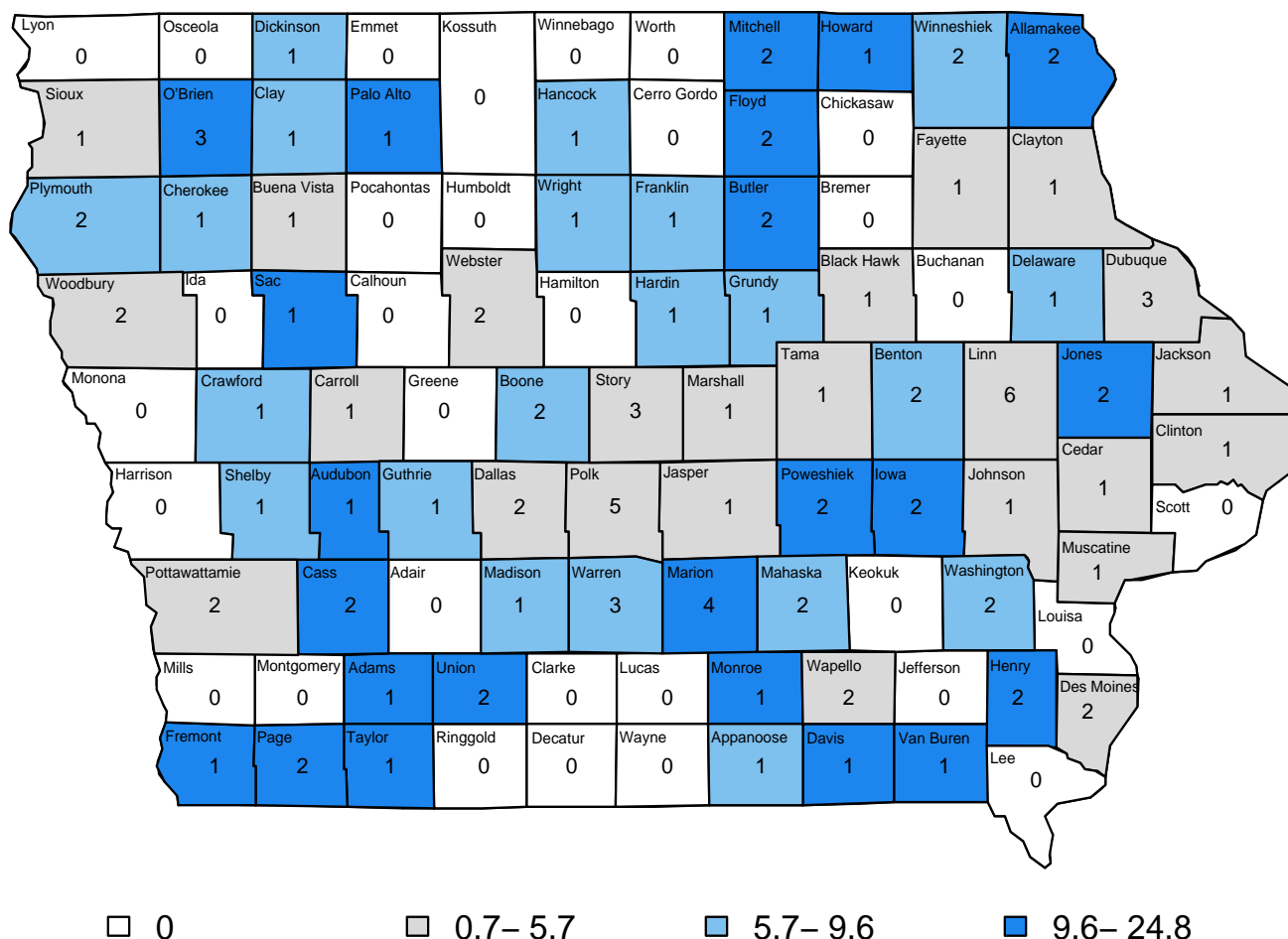
2009 Crude Rates by County Group



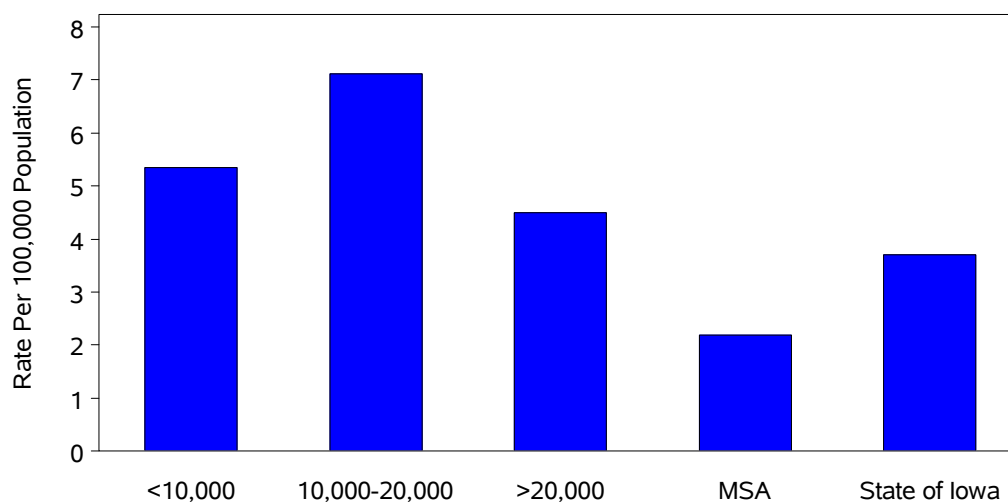
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Residential Care Facilities

2009 Counts and Crude Rates per 100,000 (shaded)



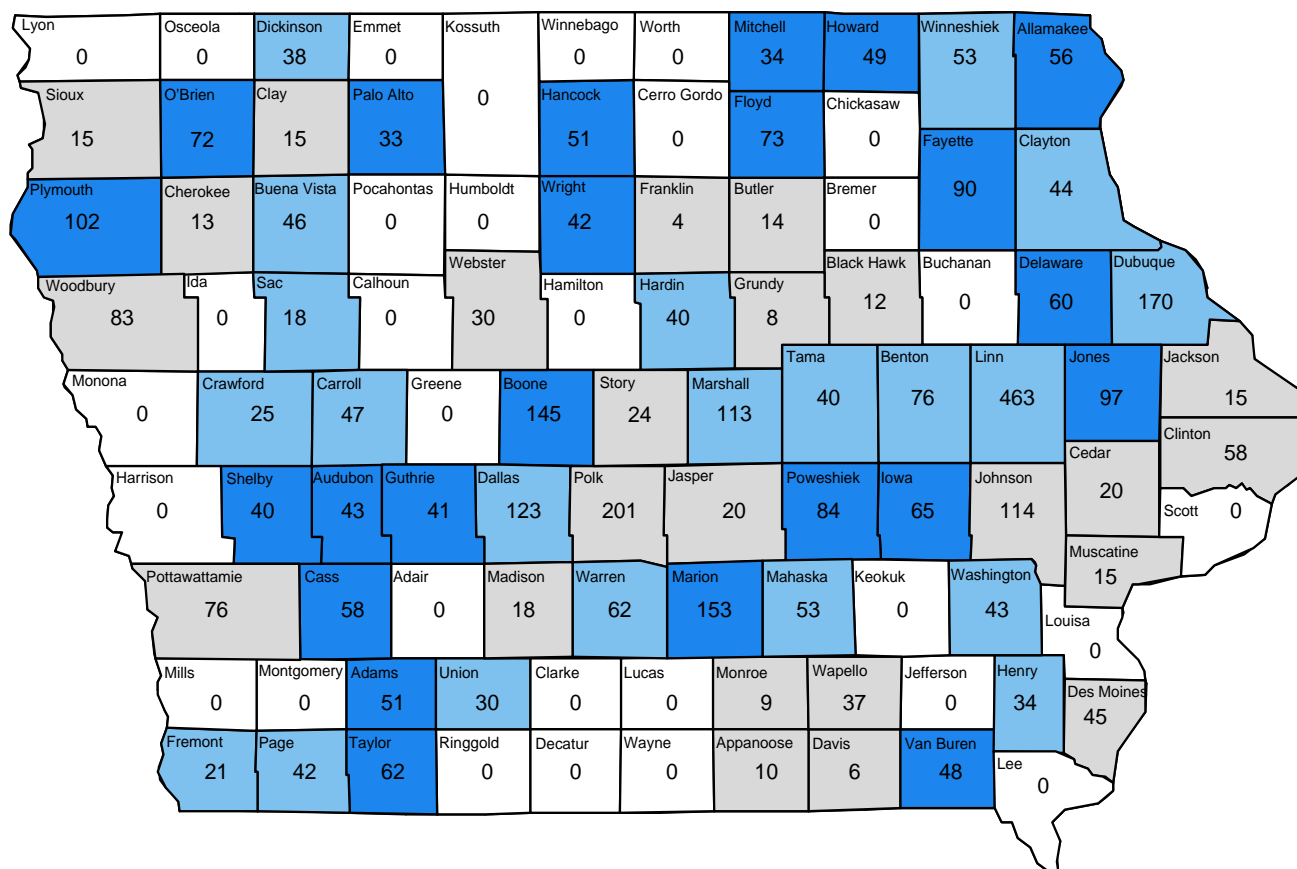
2009 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

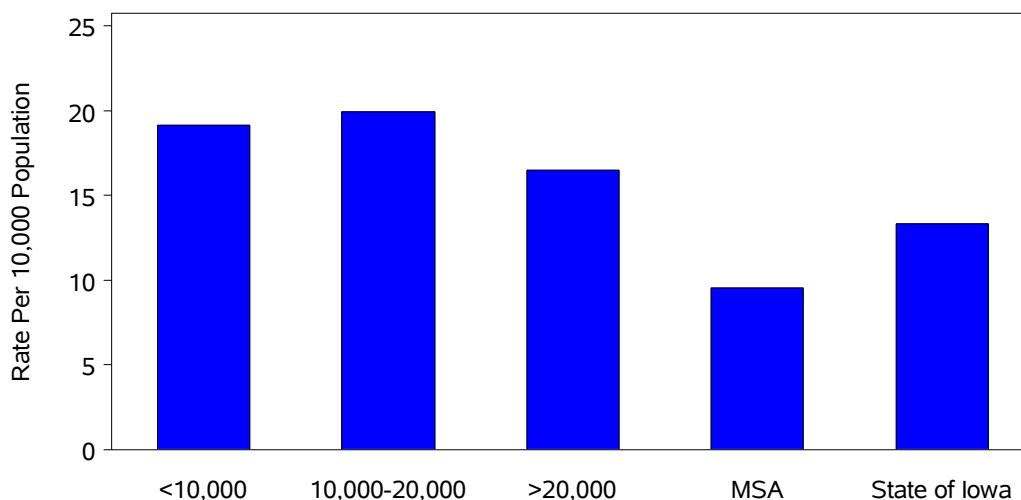
Beds in Residential Care Facilities

2009 Counts and Crude Rates per 10,000 (shaded)



□ 0 □ 0.9– 11.9 □ 11.9– 29.4 □ 29.4– 126.3

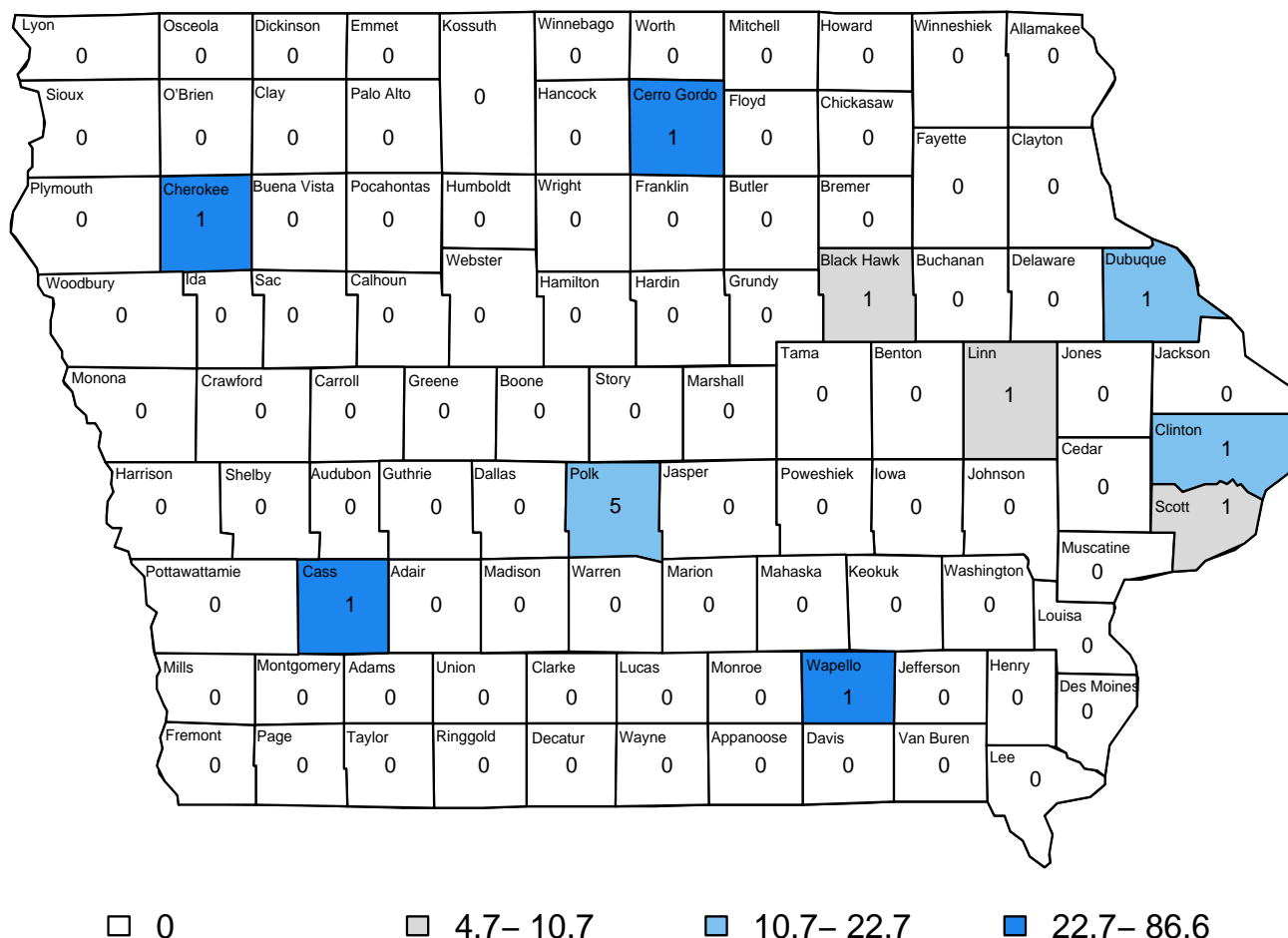
2009 Crude Rates by County Group



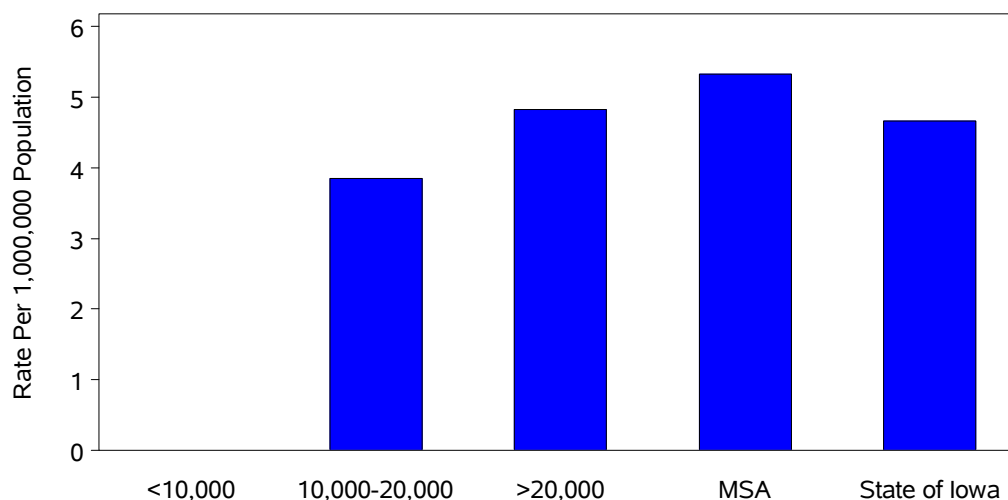
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Residential Care Facilities for Persons with Mental Illness

2009 Counts and Crude Rates per 1,000,000 (shaded)



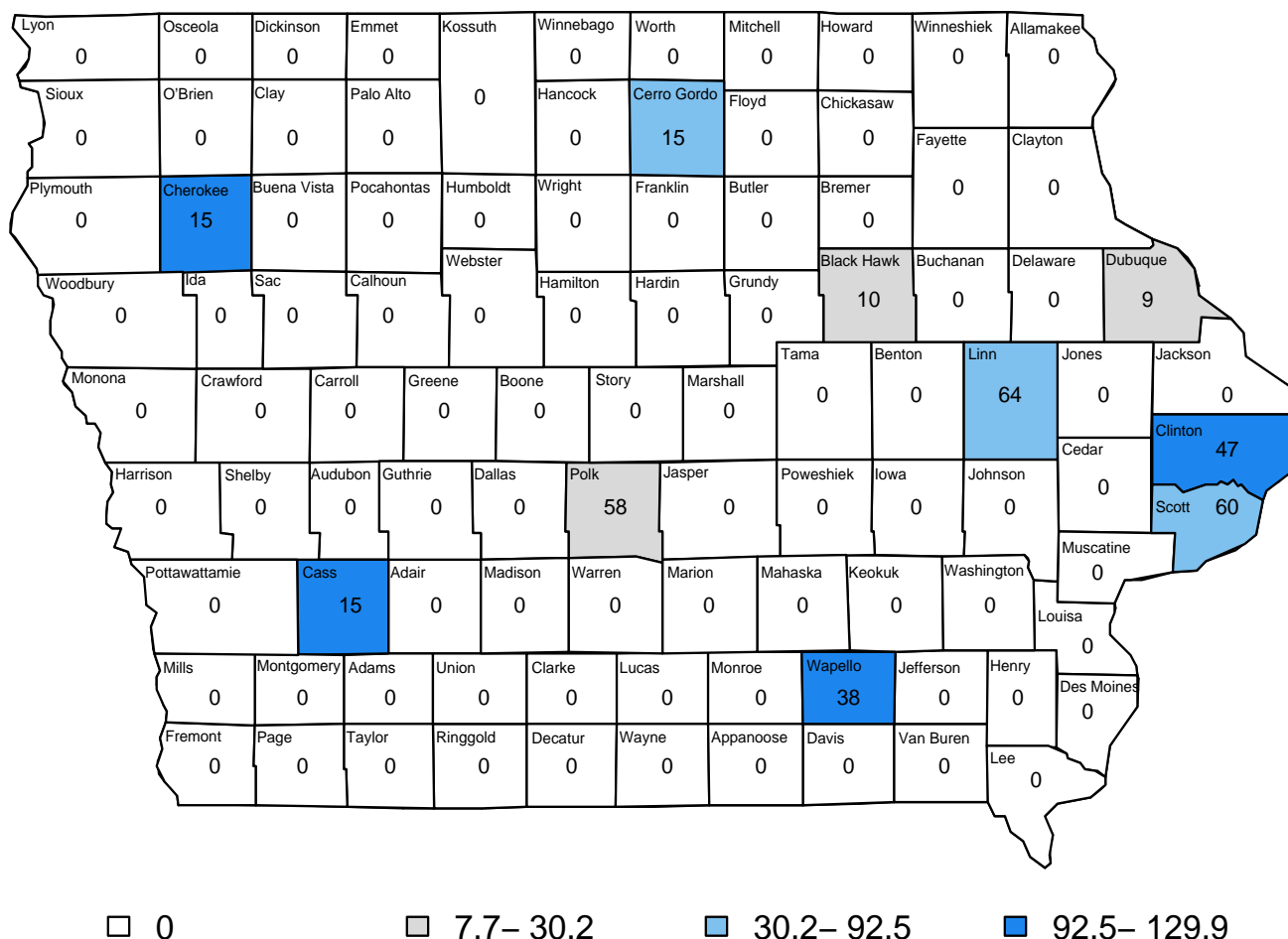
2009 Crude Rates by County Group



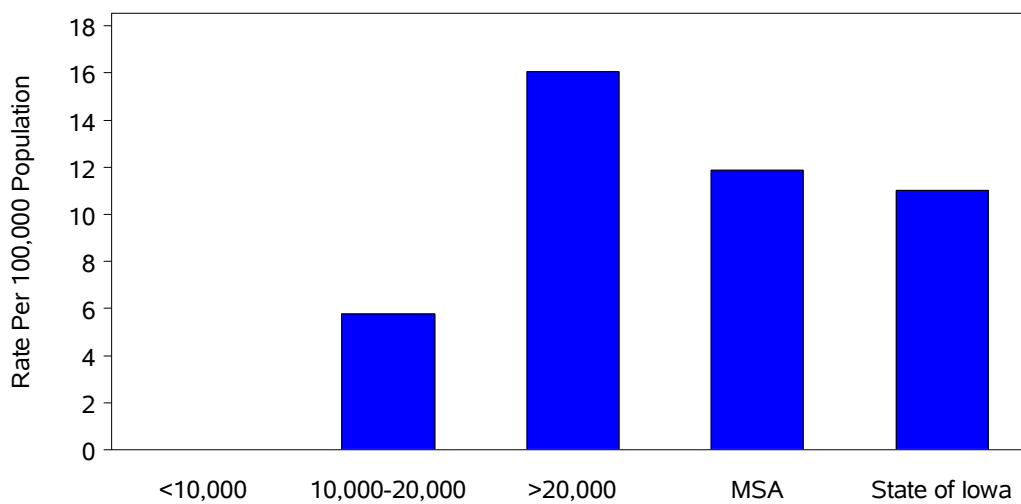
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Beds in Residential Care Facilities for Persons with Mental Illness

2009 Counts and Crude Rates per 100,000 (shaded)



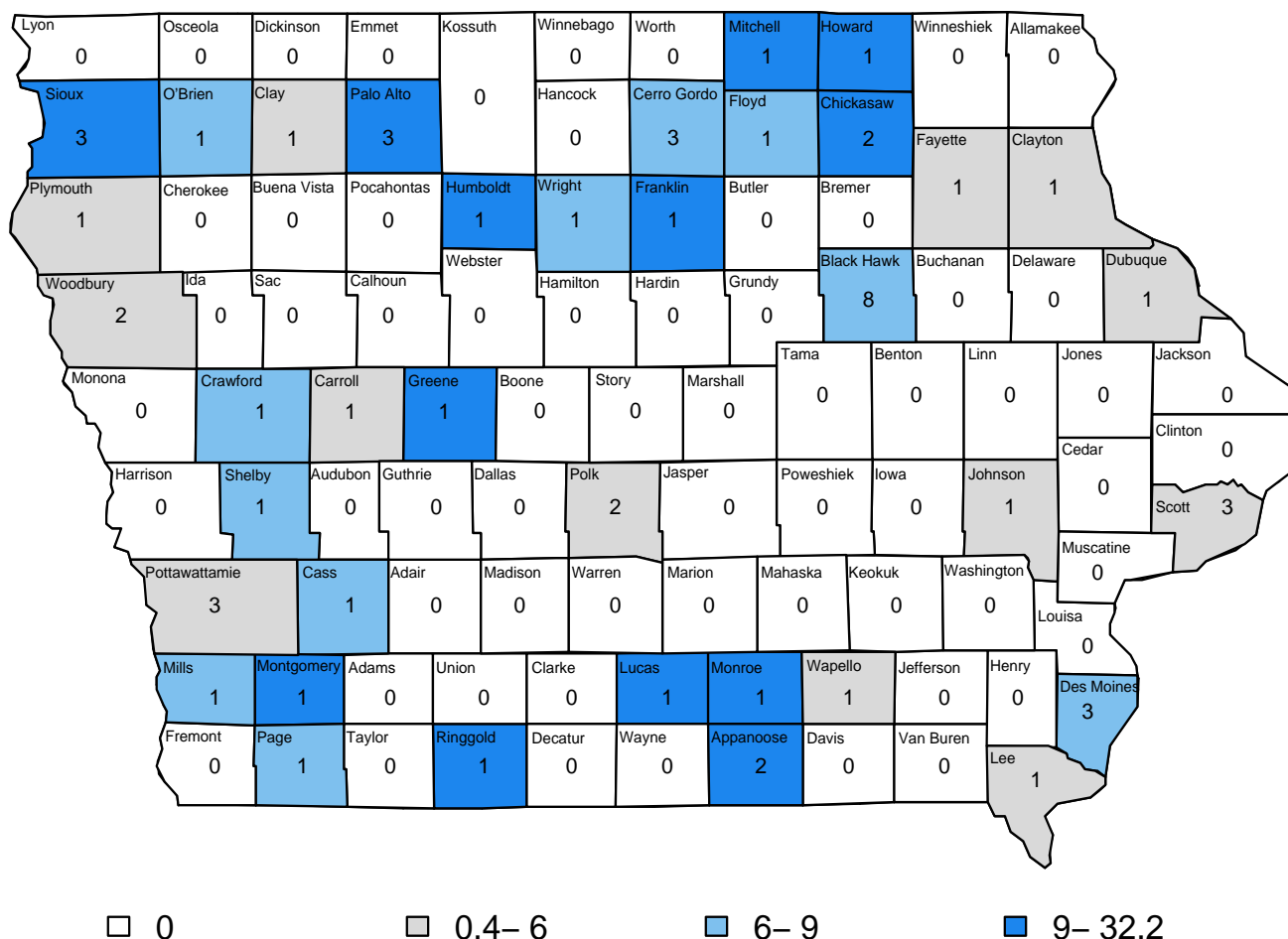
2009 Crude Rates by County Group



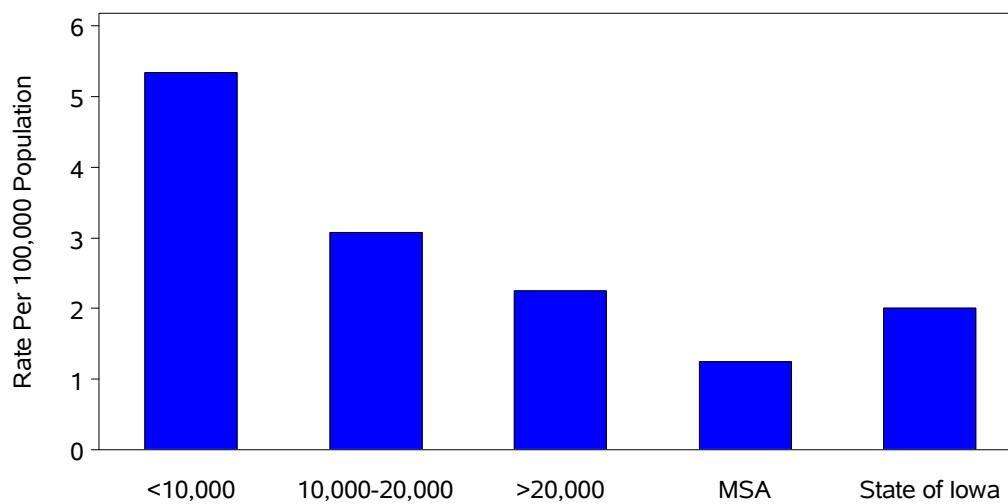
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Residential Care Facilities for the Mentally Retarded

2009 Counts and Crude Rates per 100,000 (shaded)



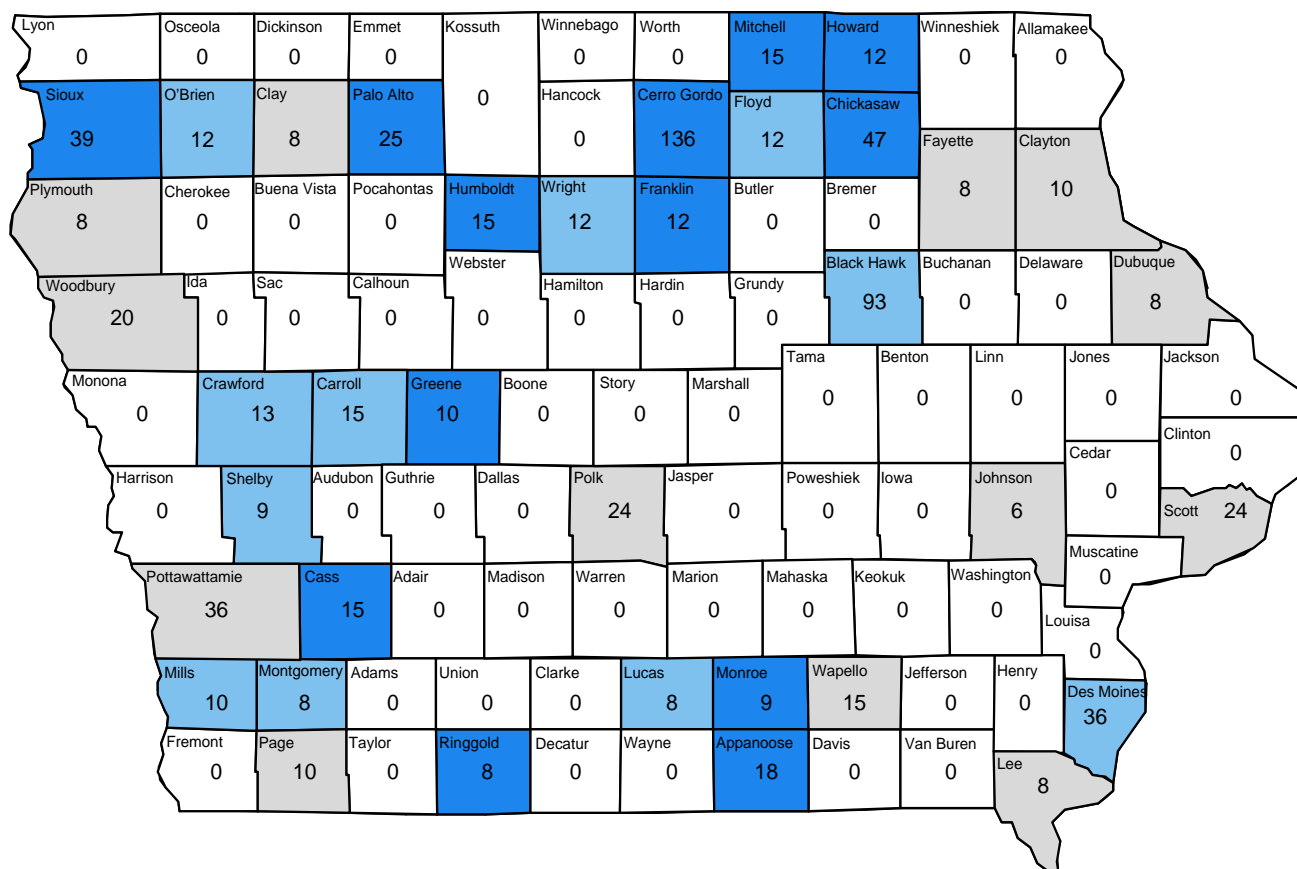
2009 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

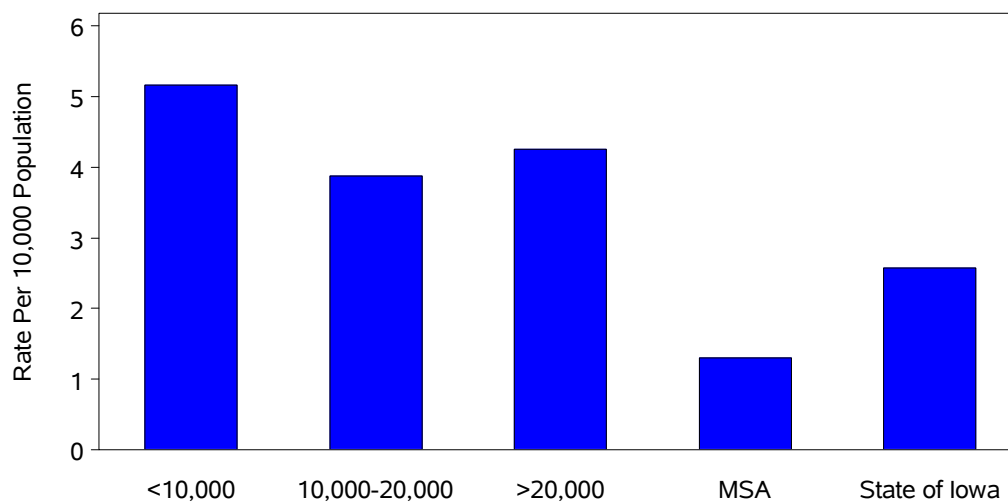
Beds in Residential Care Facilities for the Mentally Retarded

2009 Counts and Crude Rates per 10,000 (shaded)



□ 0 □ 0.4– 6.4 □ 6.4– 10.5 □ 10.5– 38.8

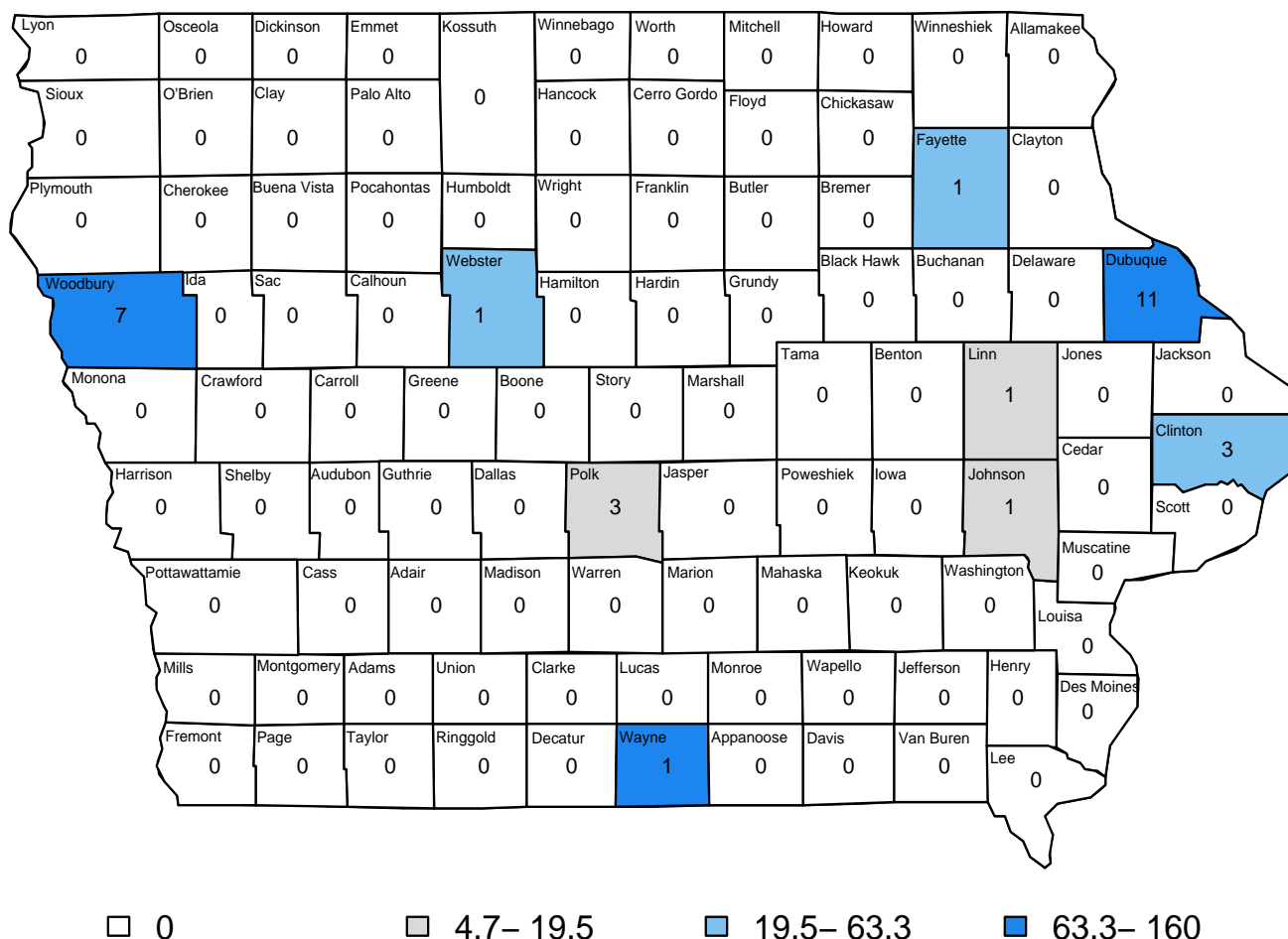
2009 Crude Rates by County Group



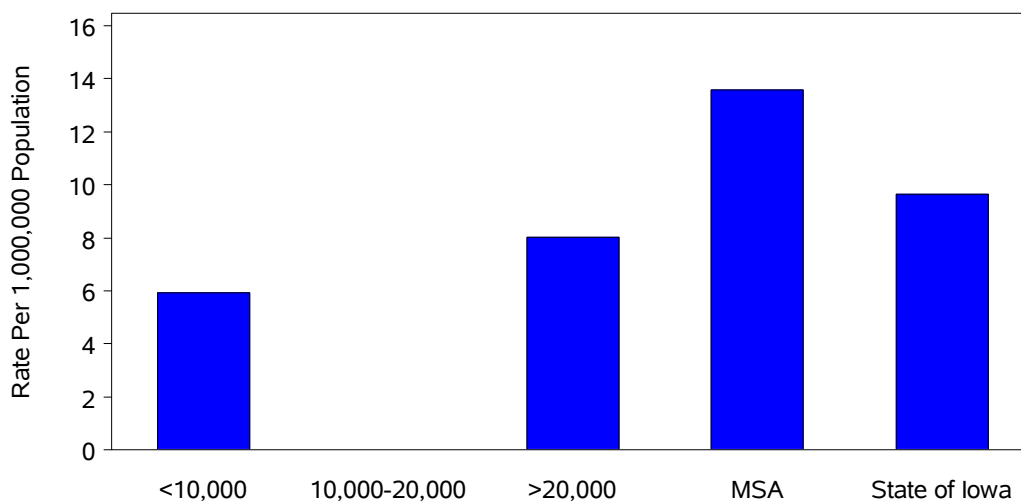
Source: Department of Inspections and Appeals, Iowa Department of Public Health

3-5 Bed Units for the Mentally Retarded

2009 Counts and Crude Rates per 1,000,000 (shaded)



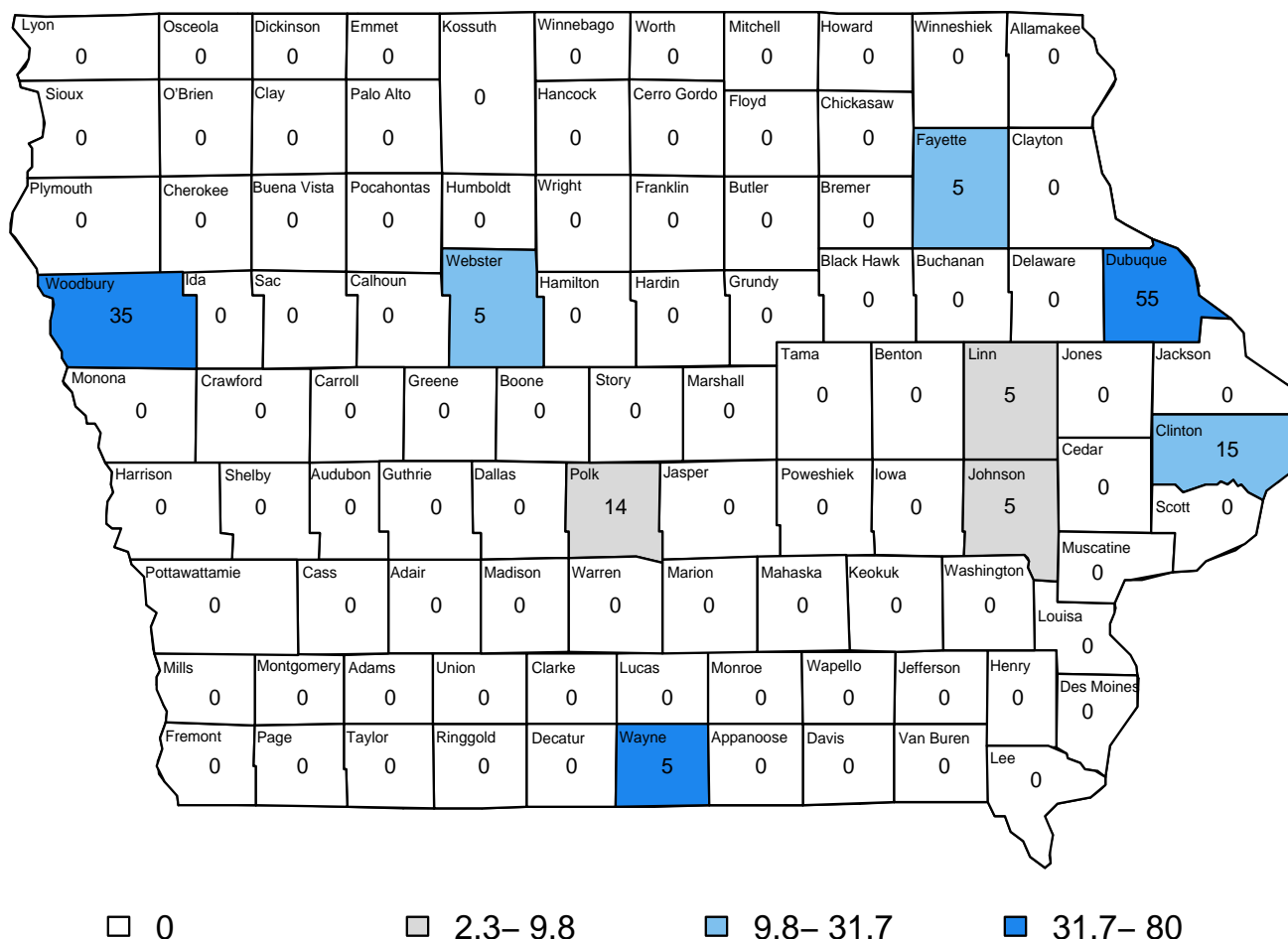
2009 Crude Rates by County Group



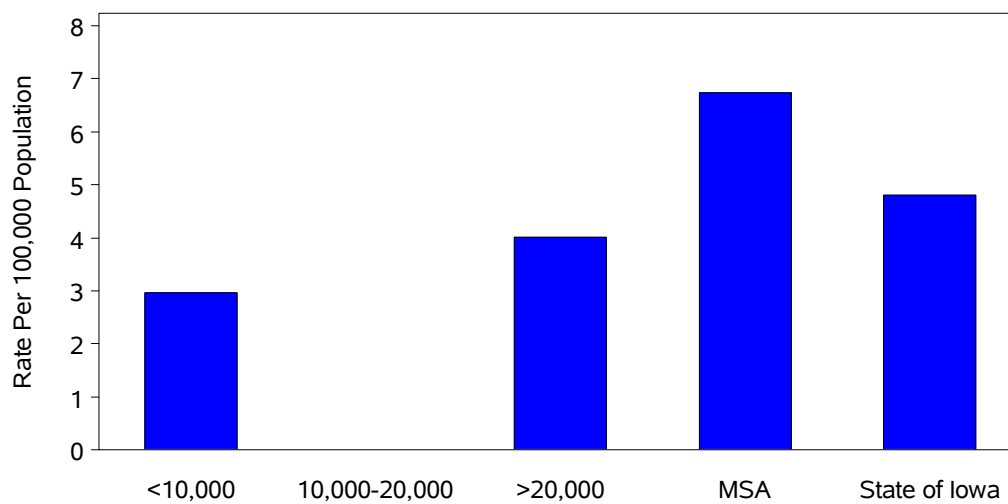
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Beds in 3-5 Bed Units for the Mentally Retarded

2009 Counts and Crude Rates per 100,000 (shaded)



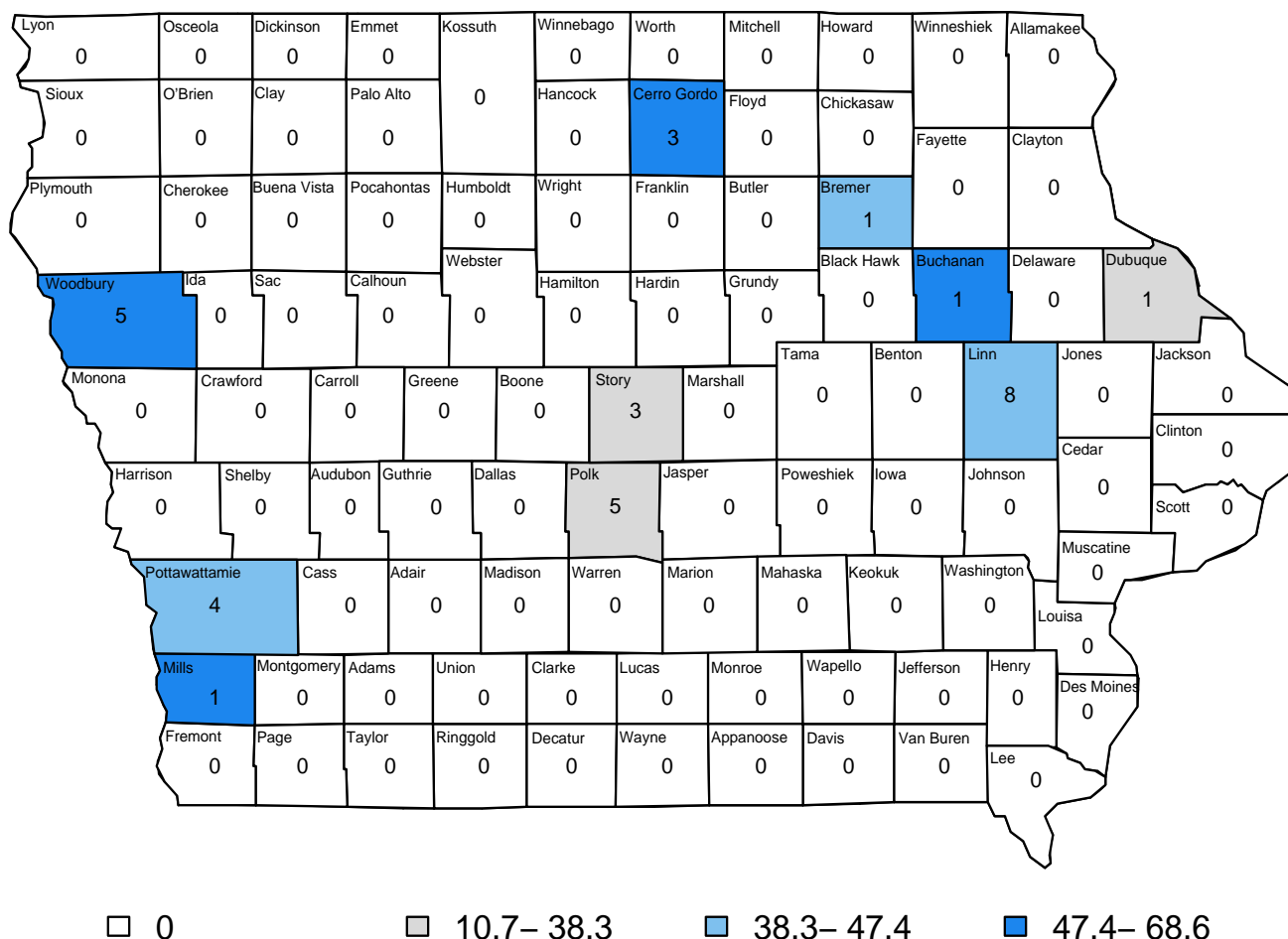
2009 Crude Rates by County Group



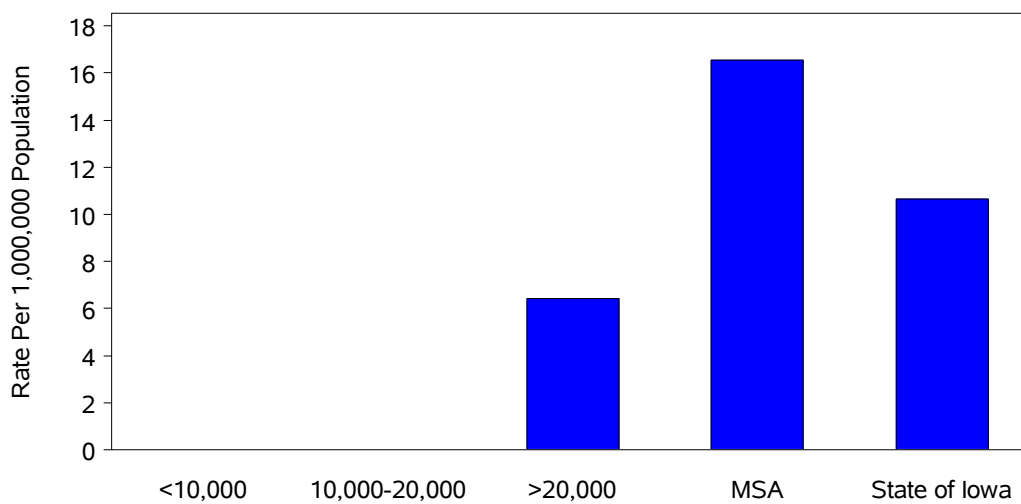
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Psychiatric Medical Institutions for Children

2009 Counts and Crude Rates per 1,000,000 (shaded)



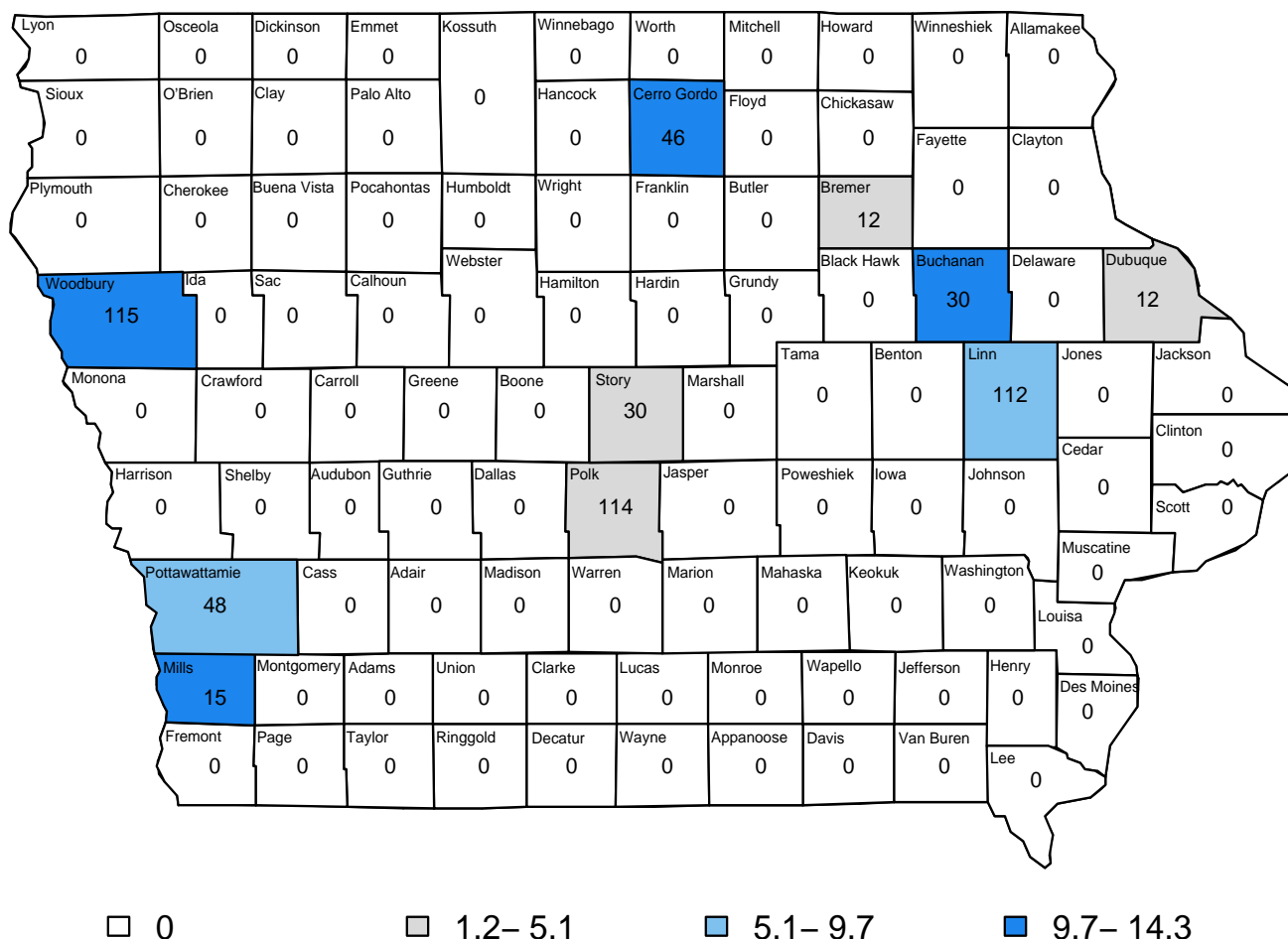
2009 Crude Rates by County Group



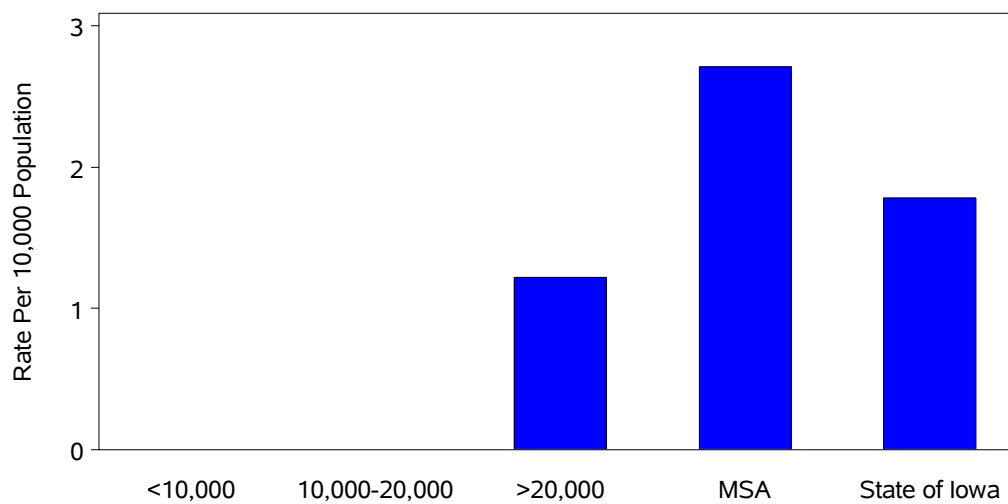
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Beds in Psychiatric Medical Institutions for Children

2009 Counts and Crude Rates per 10,000 (shaded)



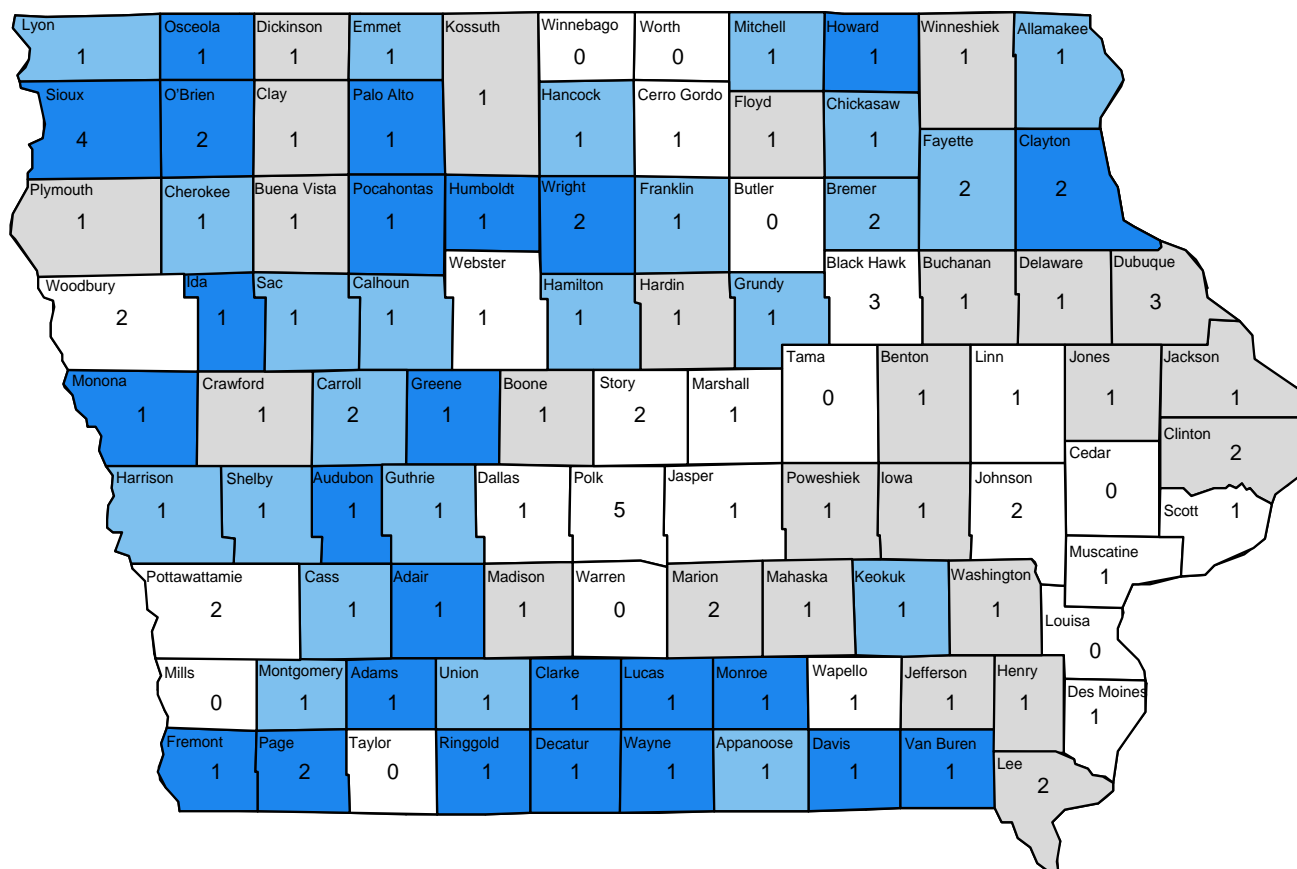
2009 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

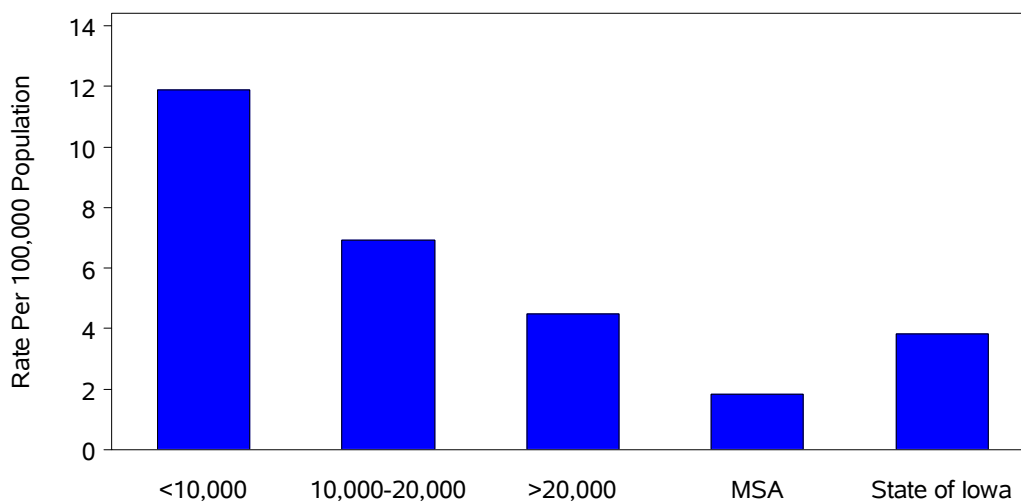
Total Trauma Care Facilities

2009 Counts and Crude Rates per 100,000 (shaded)



□ 0–3.1 □ 3.1–6.5 ■ 6.5–10.4 ■ 10.4–24.8

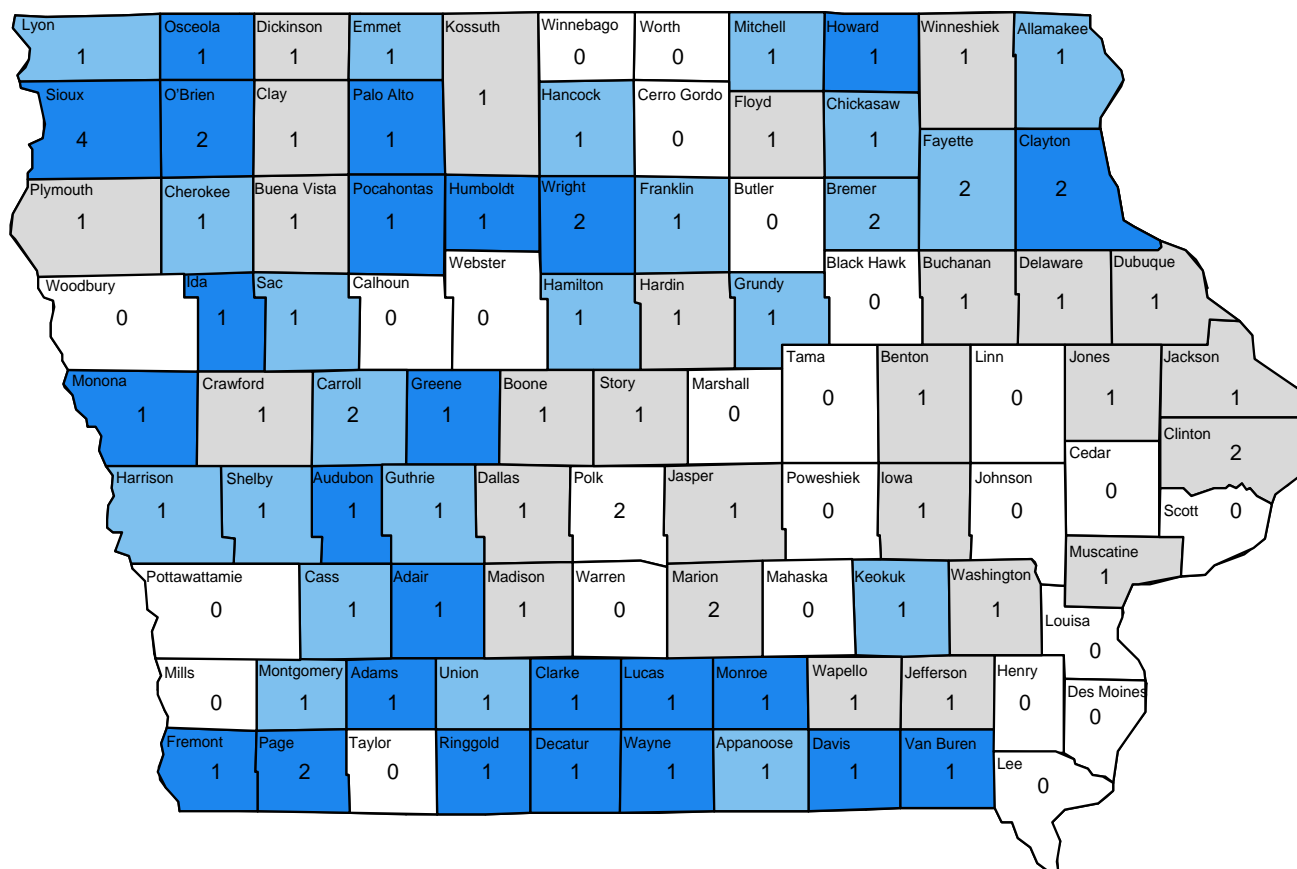
2009 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

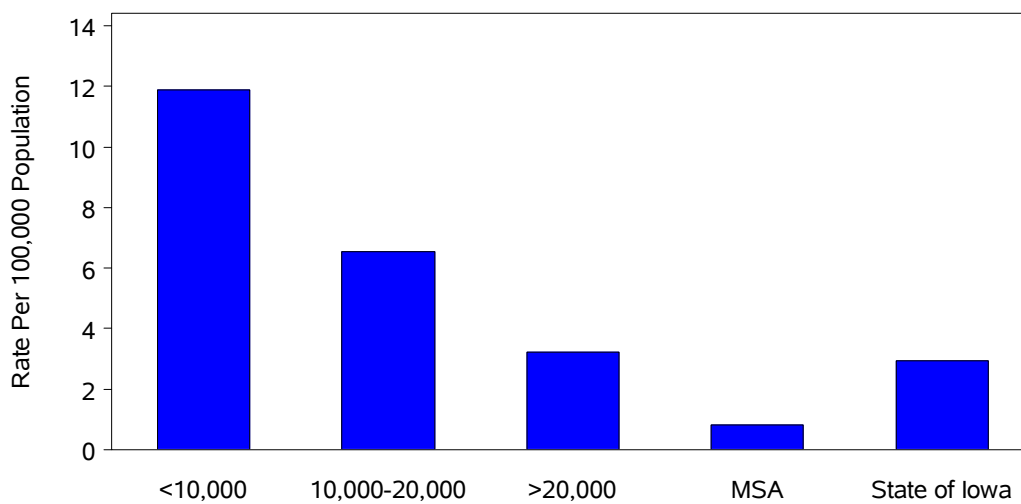
Community Trauma Care Facilities

2009 Counts and Crude Rates per 100,000 (shaded)



□ 0–0.8 □ 0.8–6.5 ■ 6.5–10.2 ■ 10.2–24.8

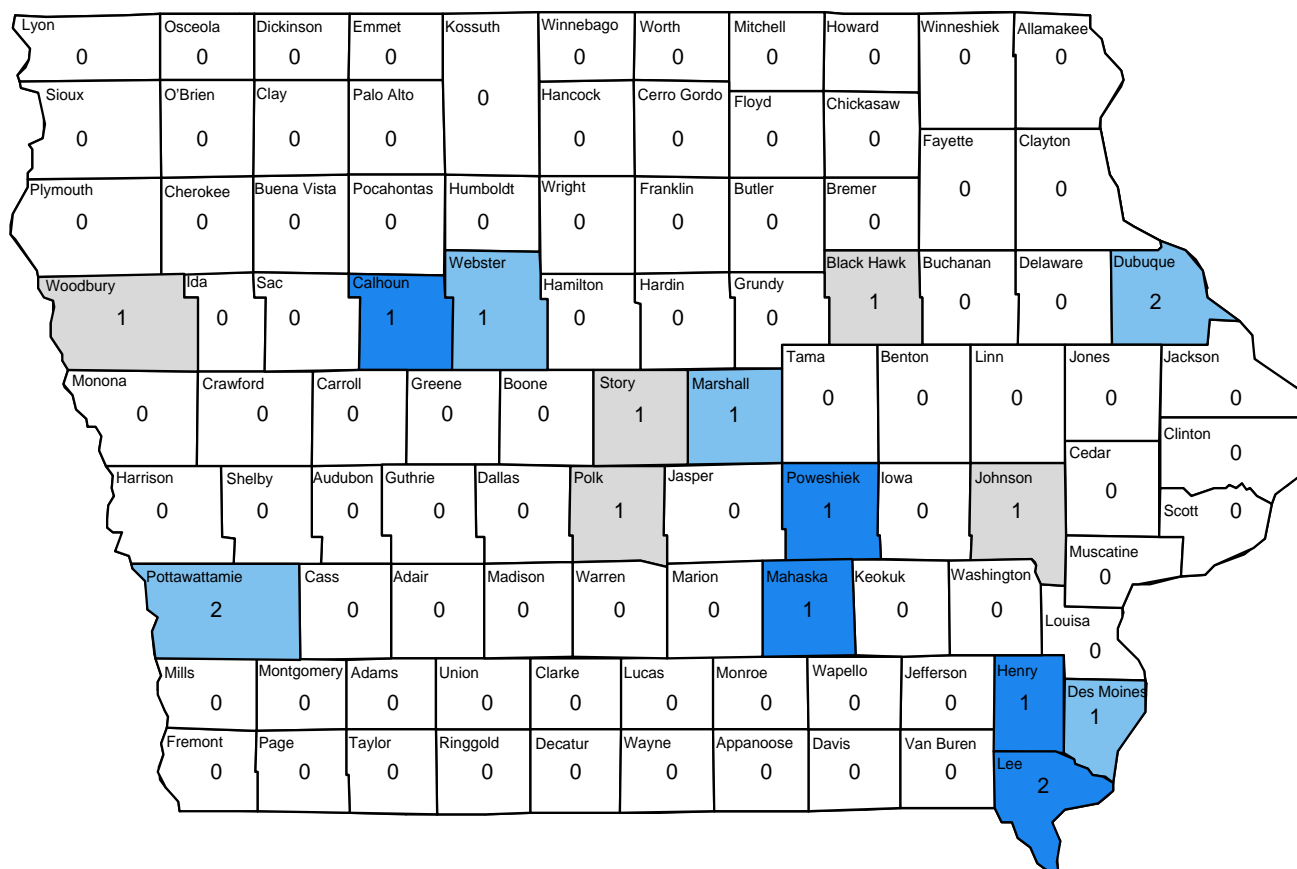
2009 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

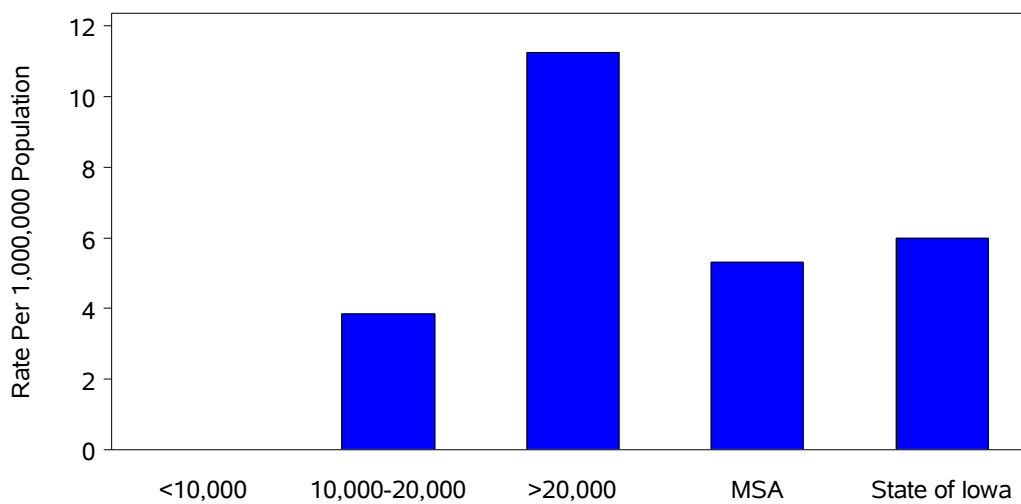
Area Trauma Care Facilities

2009 Counts and Crude Rates per 1,000,000 (shaded)



□ 0 □ 2.3– 17.8 □ 17.8– 30.5 □ 30.5– 101.2

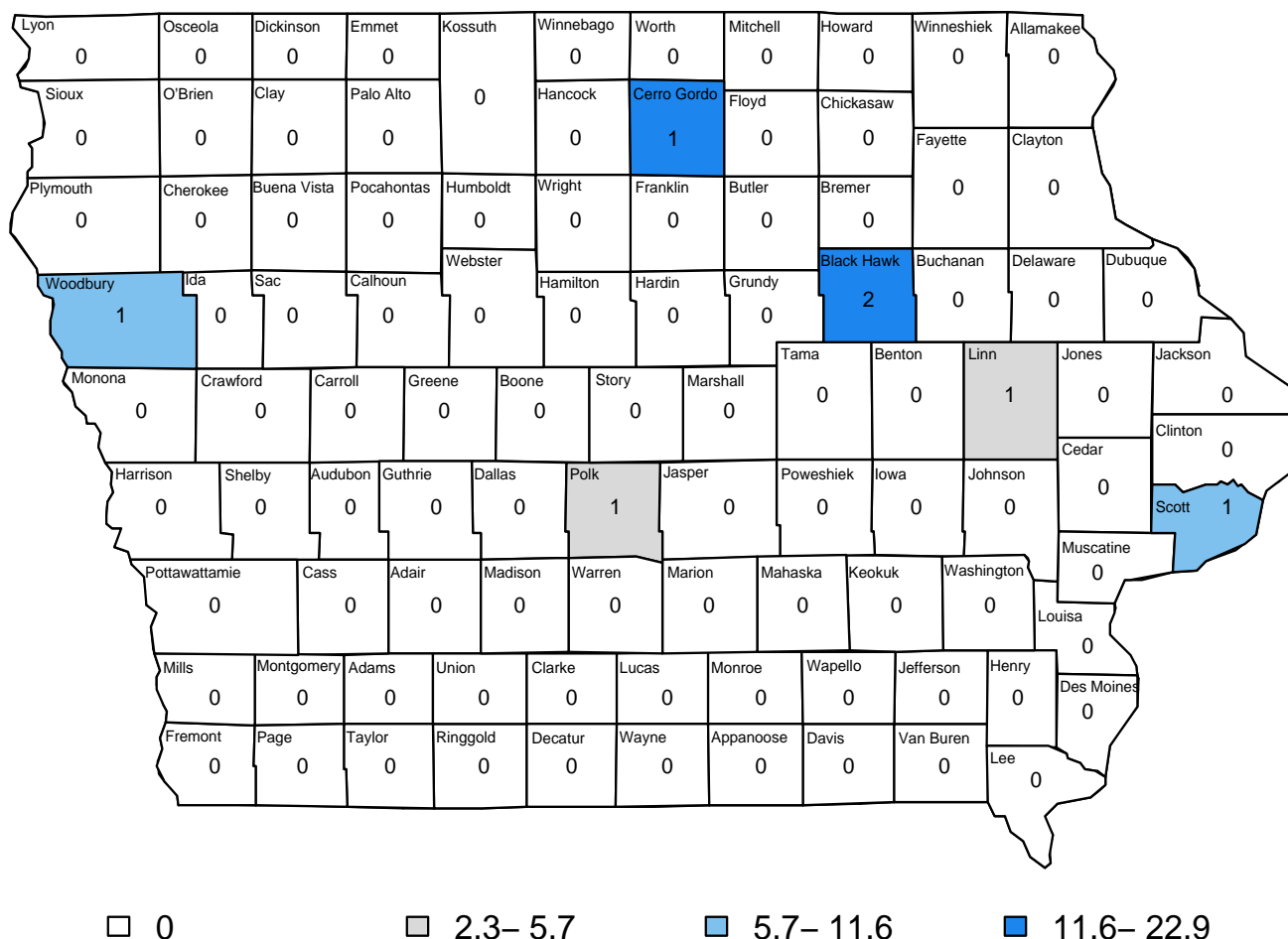
2009 Crude Rates by County Group



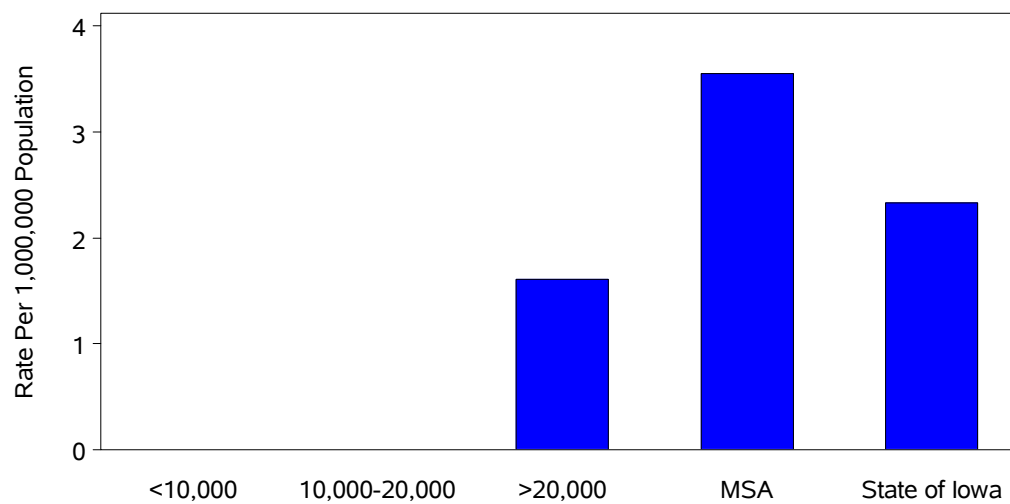
Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

Regional Trauma Care Facilities

2009 Counts and Crude Rates per 1,000,000 (shaded)



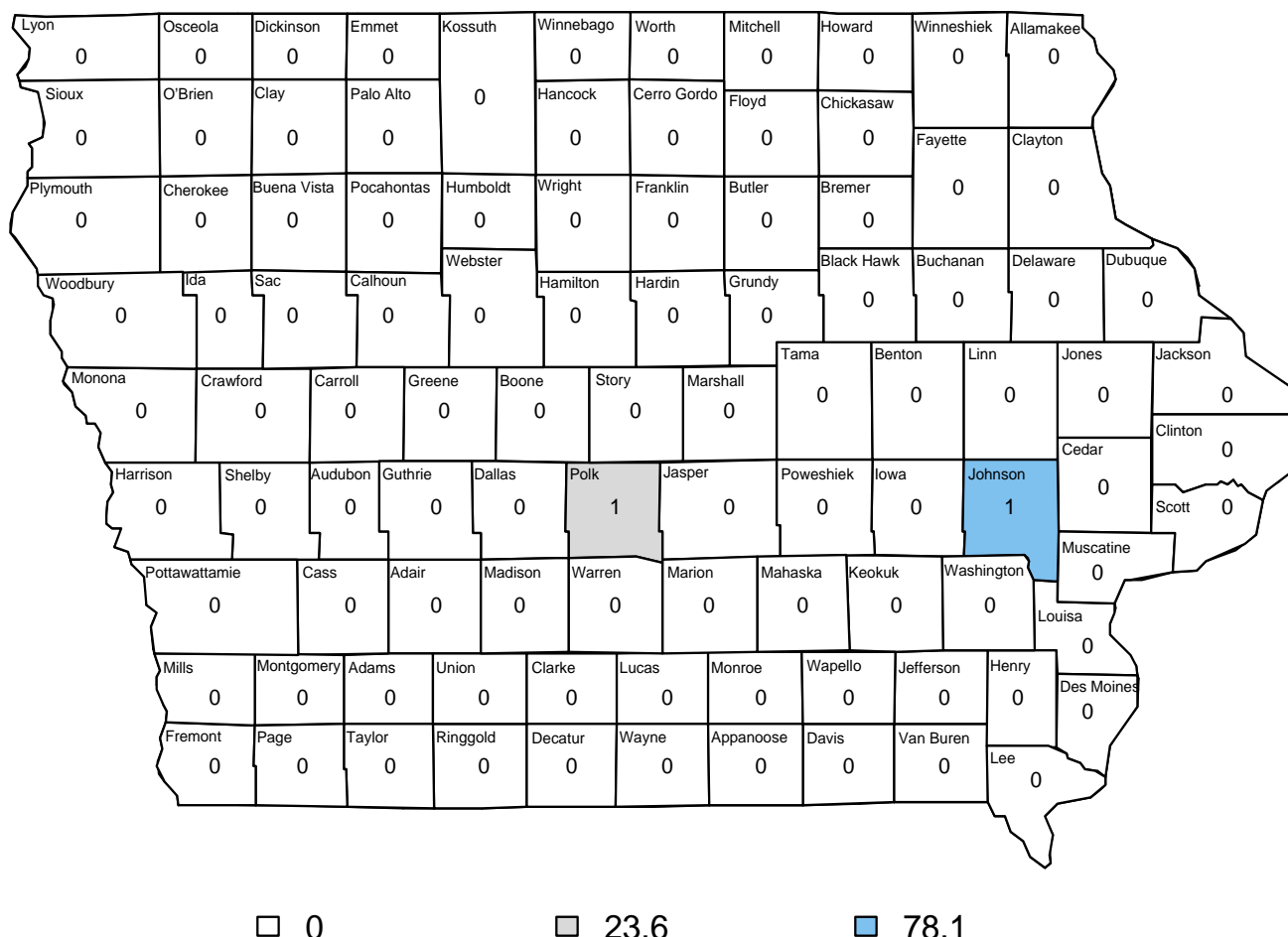
2009 Crude Rates by County Group



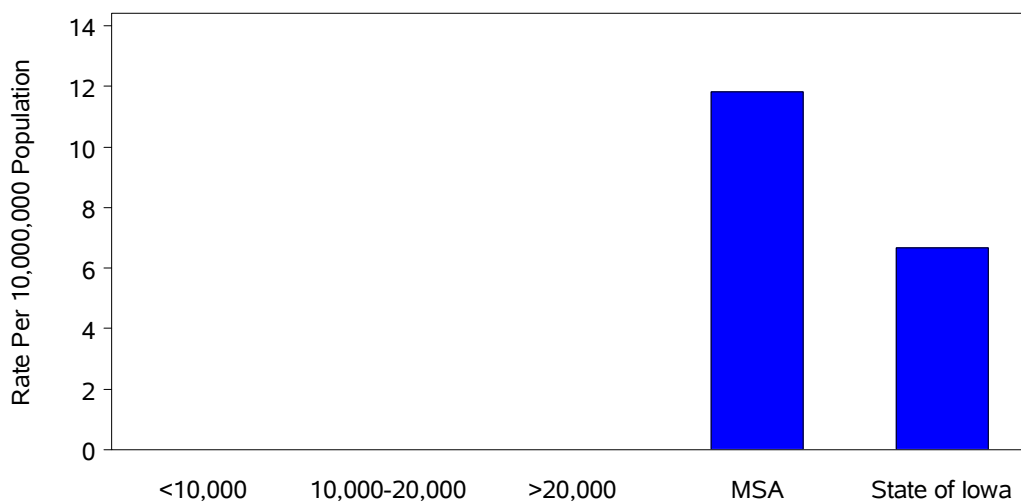
Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

Resource Trauma Care Facilities

2009 Counts and Crude Rates per 10,000,000 (shaded)



2009 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

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Environmental Health Indicators

Whether we consider climate change or water quality, it is clear that our environment affects us both directly and indirectly. While some environmental health issues have existed since the beginning of the human race, most have become evident in the last few centuries. These problems have emerged as a result of our growing and changing population. The industrial revolution has created air and water pollution problems as well as overcrowding and sanitation issues. As of June 2009, over 6.7 billion people inhabited the earth.

The environment plays a role in many health issues previously discussed including birth defects, cancer, respiratory diseases, and many infectious diseases. Other concerns include allergies, fertility, and exposure to animal and insect vectors. In Iowa, public health officials are especially concerned with the quality of their drinking water, recreational waters, indoor and outdoor air quality, lead poisoning, safe housing, and hazardous and solid waste.

As we attempt to provide food, water, and shelter for the world's population, we must remain aware of how our actions affect our local and global environment. At the same time, we must monitor and attempt to prevent any adverse health conditions that are caused by interactions with the environment.

ISSUES IN IOWA...

- ✓ Drinking water quality
- ✓ Recreational water quality
- ✓ Indoor and outdoor air quality
- ✓ Lead poisoning
- ✓ Safe housing
- ✓ Hazardous and solid waste

Childhood Blood Lead Poisoning

Childhood lead poisoning has significant effects on the health of children and on community health. Lead has adverse effects on nearly all organ systems in the body. It is especially harmful to the developing brains and nervous systems of children under the age of six years. At very high blood lead levels, children can suffer severe brain damage or even die. At blood lead levels as low as 10 micrograms per deciliter ($\mu\text{g/dL}$), a child's intelligence, hearing, and growth are affected. In a community, the presence of lead-poisoned children can be associated with an increase in the number of children with developmental deficits and learning disorders. This places an unnecessary and expensive burden on the educational system. The presence of lead-poisoned children also requires substantial community public health resources for medical and environmental case management services.

High blood lead levels have adverse effects on nearly all organ systems in the body, and are especially harmful to children.

Most cases of childhood lead poisoning are caused by lead-based paint, which is found in most homes built before 1960. Young children who live in pre-1960 homes become lead-poisoned when they put paint chips or exterior soil in their mouths or when they get house dust and soil on their hands and put their hands in their mouths.

Although lead poisoning can cause serious health problems – including death – most lead-poisoned children demonstrate no visible symptoms. This makes it much more important to have an effective program to prevent childhood lead poisoning.

Most cases of childhood lead poisoning are caused by lead-based paints found in homes built before 1960.

Since 1992, the Iowa Department of Public Health (IDPH) has recommended that all children in Iowa under the age of six years be tested for lead poisoning. In addition, state and federal laws require that all children under the age of six and covered by Medicaid be tested for lead poisoning. Finally, all Iowa children must now receive at least one blood lead test before the

age of mandatory school attendance.

In Iowa, blood lead testing is conducted by the Title V Child's Health Program, local health departments, and by many private physicians. The IDPH childhood blood lead level surveillance system tracks all testing in the state. Thus, blood lead testing results collected as required by Medicaid, as well as those collected from voluntary testing of non-Medicaid children are reported to IDPH.

In the following tables, data are presented for children who were born in calendar year 2001 and 2002 and who received at least one blood lead test before their sixth birthday. Children followed for blood lead poisoning may be tested multiple times. The test results that are presented in the following tables reflect the highest blood lead level for any particular child.

For each county, the number of children receiving a blood lead test who were identified with blood levels greater than or equal to 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$). A blood level of 10 $\mu\text{g}/\text{dL}$ has been identified by the Centers for Disease Control and Prevention as the threshold for lead poisoning in children and is categorized as "high" for the graphs. Additional data, such as the percent of children in each birth cohort who were tested for lead poisoning, are also presented.

***For Iowa children born in 2001-2002,
75.8 percent were tested for lead
poisoning, and 5.6 percent of these
children had blood lead levels greater
than or equal to 10 $\mu\text{g}/\text{dL}$.***

Of the children born in Iowa in 2001, 71.1 percent received at least one blood test before their sixth birthday (range by county: 32.4 to 100 percent), and 6.1 percent of these children had blood levels greater than or equal to 10 $\mu\text{g}/\text{dL}$ (range by county: 0.0 to 23.7 percent). Of the children born in Iowa in 2002, 80.4 percent received at least one blood test before their sixth birthday (range by county: 38.2 to 100 percent), and 5.1 percent of these children had blood levels greater than or equal to 10 $\mu\text{g}/\text{dL}$ (range by county: 0.0 to 20 percent).

Percent of Children Tested for Blood Lead Poisoning, 2001-2002

	County	2001	2002	County	2001	2002
Counties with Average Population < 10,000	Adair	76.9%	74.3%	Lucas	88.0%	84.1%
	Adams	57.9%	71.4%	Monona	56.6%	70.1%
	Audubon	95.1%	93.8%	Monroe	72.3%	100.0%
	Clarke	68.9%	86.4%	Osceola	32.4%	60.3%
	Davis	43.2%	43.9%	Palo Alto	58.3%	78.2%
	Decatur	78.0%	75.3%	Pocahontas	43.1%	67.5%
	Fremont	65.6%	97.3%	Ringgold	69.8%	85.2%
	Greene	92.9%	100.0%	Taylor	100.0%	100.0%
	Howard	72.7%	82.0%	Van Buren	44.6%	56.1%
	Humboldt	70.1%	87.0%	Wayne	87.2%	100.0%
	Ida	69.6%	78.1%	Worth	100.0%	100.0%
				Total	70.1%	80.6%
Counties with Average Population 10,000 – 20,000	Allamakee	76.5%	97.3%	Hardin	100.0%	100.0%
	Appanoose	65.7%	62.3%	Iowa	67.8%	78.8%
	Buena Vista	48.8%	75.7%	Jefferson	63.6%	67.3%
	Butler	98.5%	84.4%	Keokuk	53.2%	64.3%
	Calhoun	77.9%	97.0%	Kossuth	77.7%	84.5%
	Cass	84.1%	80.8%	Louisa	73.6%	76.5%
	Cedar	85.1%	89.1%	Lyon	42.6%	68.2%
	Cherokee	75.2%	81.7%	Mitchell	38.8%	55.1%
	Chickasaw	82.1%	87.3%	Montgomery	73.7%	100.0%
	Clay	57.8%	86.8%	O'Brien	42.3%	60.9%
	Clayton	77.0%	83.0%	Page	66.0%	92.4%
	Crawford	84.0%	88.5%	Poweshiek	74.1%	88.6%
	Delaware	63.2%	70.3%	Sac	68.0%	91.1%
	Dickinson	33.5%	38.2%	Shelby	86.7%	89.2%
	Emmet	41.6%	63.8%	Tama	90.7%	98.2%
	Floyd	77.8%	84.6%	Union	75.4%	87.7%
	Franklin	100.0%	100.0%	Winnebago	77.9%	87.7%
	Hamilton	74.9%	90.5%	Wright	92.9%	95.7%
	Hancock	75.9%	100.0%	Total	71.8%	82.2%
Counties with Average Population > 20,000	Boone	76.3%	90.7%	Lee	66.4%	75.2%
	Buchanan	70.8%	77.3%	Mahaska	82.1%	100.0%
	Carroll	69.0%	74.6%	Marion	83.5%	95.0%
	Cerro Gordo	94.7%	96.2%	Marshall	100.0%	100.0%
	Clinton	97.4%	98.3%	Muscatine	74.9%	93.8%
	Des Moines	93.8%	100.0%	Plymouth	58.0%	80.5%
	Fayette	92.3%	100.0%	Sioux	55.2%	74.5%
	Henry	95.4%	87.9%	Wapello	100.0%	100.0%
	Jackson	89.1%	98.6%	Webster	83.4%	94.5%
	Jasper	54.1%	65.1%	Winneshiek	74.5%	88.8%
				Total	81.3%	90.0%
MSA Counties	Benton	69.5%	71.6%	Linn	71.6%	77.4%
	Black Hawk	90.7%	57.0%	Madison	57.0%	71.6%
	Bremer	77.3%	77.3%	Mills	77.3%	88.3%
	Dallas	78.3%	62.3%	Polk	62.3%	75.1%
	Dubuque	68.4%	47.4%	Pottawattamie	47.4%	51.9%
	Grundy	74.4%	85.9%	Scott	85.9%	85.8%
	Guthrie	71.1%	70.3%	Story	70.3%	81.3%
	Harrison	40.0%	56.6%	Warren	56.6%	68.5%
	Johnson	56.9%	52.1%	Washington	52.1%	69.2%
	Jones	78.3%	53.9%	Woodbury	53.9%	74.4%
				Total	67.4%	76.6%
State Total		71.1%	80.4%			

¹ Children born in years 2001, 2002

Source: Iowa Department of Public Health, Bureau of Lead Poisoning Prevention

Source: Iowa Department of Public Health, Bureau of Lead Poisoning Prevention

Elevated Levels of Blood Lead: Children Born in 2002¹

	Counties with Average Population < 10,000					Counties with Average Population 10,000 – 20,000					Counties with Average Population > 20,000					MSA Counties				
	County	# Born	# Tested	≥ 10 µg/dL	Total % High	County	# Born	# Tested	≥ 10 µg/dL	Total % High	County	# Born	# Tested	≥ 10 µg/dL	Total % High	County	# Born	# Tested	≥ 10 µg/dL	Total % High
Counties with Average Population < 10,000	Adair	74	55	3	5.5%	Lucas	107	90	7	7.8%	Hardin	190	190	18	9.5%	Linn	2,751	2,128	93	4.4%
	Adams	49	35	1	2.9%	Monona	107	75	11	14.7%	Iowa	179	141	11	7.8%	Madison	208	149	4	2.7%
	Audubon	48	45	5	11.1%	Monroe	81	81	5	6.2%	Jefferson	147	99	2	2.0%	Mills	163	144	7	4.9%
	Clarke	110	95	7	7.4%	Osceola	73	44	0	0.0%	Keokuk	143	92	4	4.3%	Polk	6,140	4,612	121	2.6%
	Davis	114	50	2	4.0%	Palo Alto	110	86	2	2.3%	Kossuth	168	142	1	0.7%	Pottawattamie	1,180	612	15	2.5%
	Decatur	85	64	5	7.8%	Pocahontas	80	54	3	5.6%	Louisa	200	153	3	2.0%	Scott	2,275	1,952	90	4.6%
	Fremont	74	72	3	4.2%	Ringgold	54	46	1	2.2%	Lyon	157	107	6	5.6%	Story	922	750	24	3.2%
	Greene	94	94	11	11.7%	Taylor	73	73	10	13.7%	Mitchell	127	70	6	8.6%	Warren	489	335	3	0.9%
	Howard	111	91	8	8.8%	Van Buren	82	46	2	4.3%	Montgomery	139	139	8	5.8%	Washington	308	213	8	3.8%
	Humboldt	108	94	2	2.1%	Wayne	84	84	15	17.9%	O'Brien	169	103	13	12.6%	Winnebago	114	100	3	3.0%
	Ida	96	75	15	20.0%	Worth	67	67	5	7.5%	Page	171	158	23	14.6%	Wright	162	155	15	9.7%
						Total	1,881	1,516	123	8.1%	Poweshiek	193	171	10	5.8%	Total	5,977	4,914	304	6.2%
											Sac	90	82	5	6.1%					
											Shelby	157	140	6	4.3%					
Counties with Average Population 10,000 – 20,000	Allamakee	186	181	12	6.6%	Tama	220	216	21	9.7%	Boone	290	263	16	6.1%	Lee	404	304	19	6.3%
	Appanoose	154	96	7	7.3%	Union	138	121	15	12.4%	Buchanan	304	235	13	5.5%	Mahaska	251	251	24	9.6%
	Buena Vista	255	193	6	3.1%	Winnebago	114	100	3	3.0%	Carroll	240	179	10	5.6%	Marion	423	402	11	2.7%
	Butler	160	135	6	4.4%	Wright	162	155	15	9.7%	Cerro Gordo	503	484	14	2.9%	Marshall	539	539	62	11.5%
	Calhoun	99	96	1	1.0%	Total	5,977	4,914	304	6.2%	Clinton	593	583	29	5.0%	Muscatine	631	592	29	4.9%
	Cass	146	118	5	4.2%						Des Moines	497	497	51	10.3%	Plymouth	302	243	9	3.7%
	Cedar	184	164	7	4.3%						Fayette	201	201	14	7.0%	Sioux	462	344	17	4.9%
	Cherokee	115	94	12	12.8%						Henry	240	211	14	6.6%	Wapello	441	441	32	7.3%
	Chickasaw	134	117	6	5.1%						Jackson	212	209	14	6.7%	Webster	471	445	27	6.1%
	Clay	189	164	4	2.4%						Jasper	458	298	11	3.7%	Winneshiek	196	174	14	8.0%
	Clayton	176	146	4	2.7%															
	Crawford	218	193	11	5.7%															
	Delaware	212	149	6	4.0%															
	Dickinson	170	65	0	0.0%															
	Emmet	130	83	5	6.0%															
Counties with Average Population > 20,000	Floyd	175	148	13	8.8%															
	Franklin	120	120	11	9.2%															
	Hamilton	179	162	13	8.0%															
	Hancock	111	111	5	4.5%															
MSA Counties	Benton	303	238	20	8.4%															
	Black Hawk	1,602	1,487	99	6.7%															
	Bremer	255	244	9	3.7%															
	Dallas	604	604	22	3.6%															
	Dubuque	1,151	789	28	3.5%															
	Grundy	127	127	4	3.1%															
	Guthrie	148	112	8	7.1%															
	Harrison	171	98	2	2.0%															
	Johnson	1,443	947	19	2.0%															
	Jones	207	159	5	3.1%															
	State Total	38,274	25,464	1,685	6.6%															

¹Children tested before six years of age

Source: Iowa Department of Public Health, Bureau of Lead Poisoning Prevention

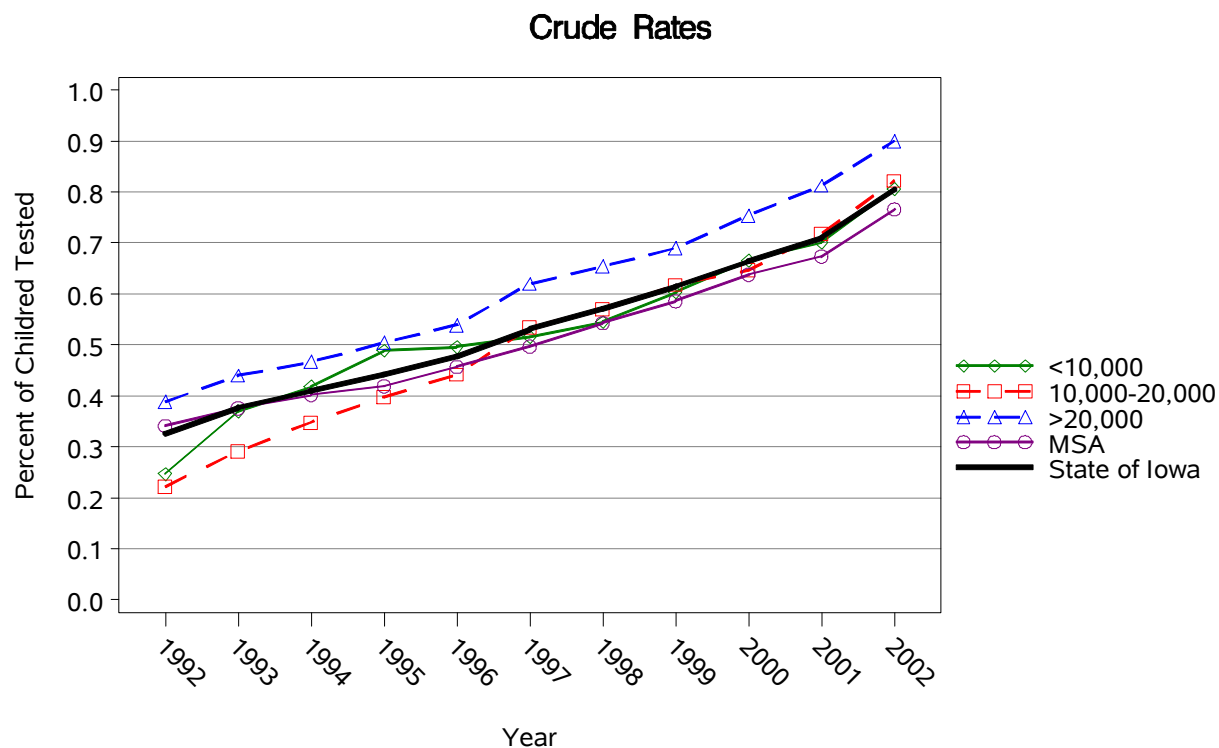
Elevated Levels of Blood Lead: Children Born in 2001-2002¹

	Counties with Average Population < 10,000			Counties with Average Population 10,000 – 20,000		
	County	Number Tested	% with High Levels	County	Number Tested	% with High Levels
Counties with Average Population < 10,000	Adair	105	5.7%	Lucas	185	13.0%
	Adams	57	12.3%	Monona	139	15.1%
	Audubon	103	7.8%	Monroe	141	7.1%
	Clarke	188	9.0%	Osceola	68	2.9%
	Davis	104	1.9%	Palo Alto	146	4.1%
	Decatur	128	8.6%	Pocahontas	82	3.7%
	Fremont	131	4.6%	Ringgold	90	4.4%
	Greene	198	10.6%	Taylor	155	13.5%
	Howard	171	5.3%	Van Buren	87	4.6%
	Humboldt	176	5.1%	Wayne	159	17.0%
	Ida	130	18.5%	Worth	154	5.2%
				Total	2,897	8.6%
Counties with Average Population 10,000 – 20,000	Allamakee	311	6.8%	Hardin	422	12.1%
	Appanoose	188	5.3%	Iowa	263	8.0%
	Buena Vista	310	3.9%	Jefferson	197	2.5%
	Butler	268	6.0%	Keokuk	159	3.8%
	Calhoun	170	4.7%	Kossuth	264	0.8%
	Cass	250	5.2%	Louisa	270	3.7%
	Cedar	324	5.6%	Lyon	167	7.2%
	Cherokee	182	12.6%	Mitchell	129	6.2%
	Chickasaw	232	3.9%	Montgomery	240	6.7%
	Clay	282	2.5%	O'Brien	166	11.4%
	Clayton	313	7.3%	Page	263	13.7%
	Crawford	382	6.8%	Poweshiek	320	6.9%
	Delaware	278	5.0%	Sac	150	6.7%
	Dickinson	117	0.9%	Shelby	238	5.0%
	Emmet	135	5.9%	Tama	430	10.2%
	Floyd	295	6.4%	Union	222	14.0%
	Franklin	247	9.3%	Winnebago	202	2.5%
	Hamilton	296	6.8%	Wright	300	10.7%
	Hancock	212	4.7%	Total	9,194	6.8%
Counties with Average Population > 20,000	Boone	485	5.8%	Lee	577	7.3%
	Buchanan	448	6.5%	Mahaska	494	8.1%
	Carroll	335	5.4%	Marion	721	2.4%
	Cerro Gordo	934	3.9%	Marshall	1,080	13.7%
	Clinton	1,180	5.5%	Muscatine	1,081	6.8%
	Des Moines	968	10.2%	Plymouth	406	5.7%
	Fayette	392	7.1%	Sioux	606	6.4%
	Henry	417	5.0%	Wapello	885	7.2%
	Jackson	421	8.3%	Webster	863	5.6%
	Jasper	547	3.3%	Winneshiek	326	6.1%
				Total	13,166	6.8%
MSA Counties	Benton	450	7.6%	Linn	4,165	5.0%
	Black Hawk	2,934	6.6%	Madison	247	4.5%
	Bremer	428	3.7%	Mills	284	4.6%
	Dallas	1,016	3.7%	Polk	8,416	3.2%
	Dubuque	1,595	3.8%	Pottawattamie	1,191	2.7%
	Grundy	220	3.6%	Scott	3,854	4.9%
	Guthrie	208	7.2%	Story	1,400	2.9%
	Harrison	162	1.9%	Warren	624	1.4%
	Johnson	1,728	1.9%	Washington	385	6.5%
	Jones	314	5.7%	Woodbury	2,060	9.3%
				Total	31,681	4.4%
State Total		56,938	5.6%			

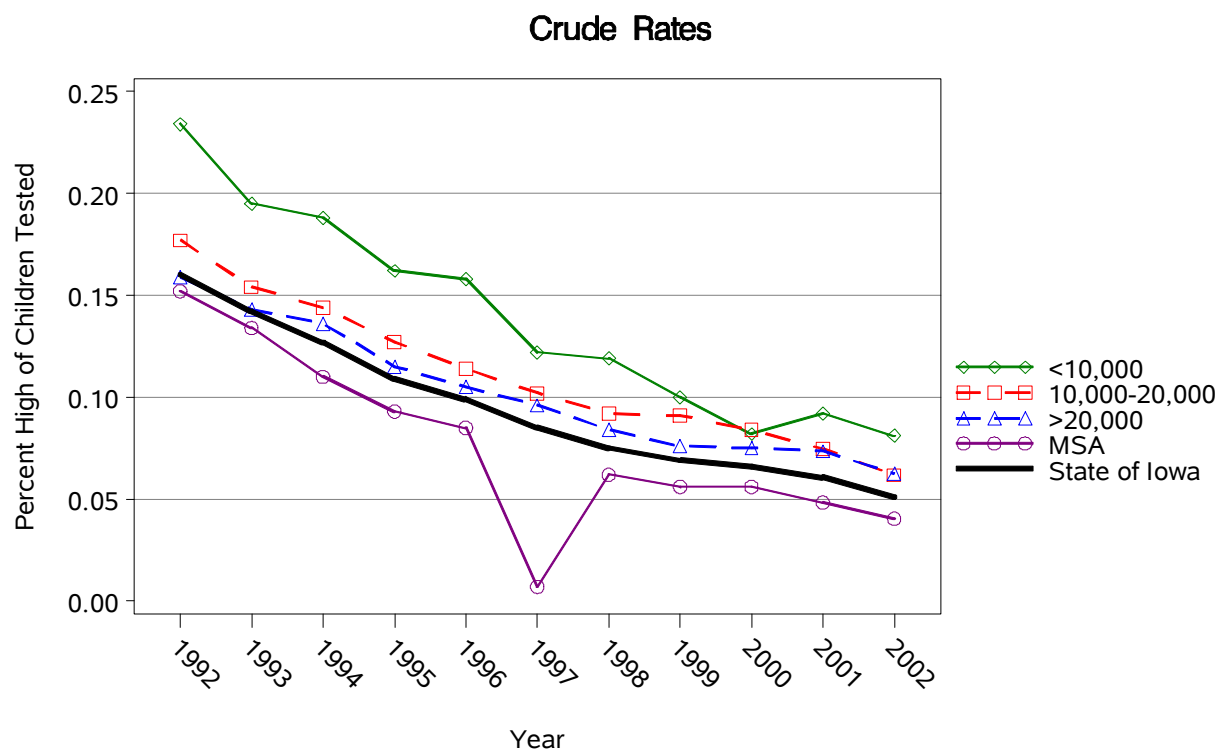
¹Children tested before six years of age

Source: Iowa Department of Public Health, Bureau of Lead Poisoning Prevention

Tested for Blood Lead: Children Born in 1992-2002



Elevated Levels of Blood Lead: Children Born in 1992-2002



Appendix I: Data Sources

Public Health Information Websites

National

Agency for Healthcare Research and Quality	http://www.ahrq.gov/
Centers for Disease Control and Prevention	http://www.cdc.gov/
Healthy People	http://www.healthypeople.gov/
National Center for Health Statistics	http://www.cdc.gov/nchs/
National Institutes of Health	http://www.nih.gov/
US Census Bureau	http://www.census.gov/
US Department of Health and Human Services	http://www.hhs.gov/

Iowa

Iowa Department of Education	www.iowa.gov/educate
Iowa Department of Human Services	http://www.dhs.state.ia.us/
Iowa Department of Public Health	http://www.idph.state.ia.us/
Iowa Kids Count	http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=IA
State Health Registry of Iowa	http://www.public-health.uiowa.edu/shri/
University of Iowa College of Public Health	http://www.public-health.uiowa.edu/

Fact Book Item	Data Source
Introduction	
Healthy Iowans 2010 Leading Indicators	Iowa Department of Public Health Website: http://www.idph.state.ia.us/bhpl/healthy_iowans_2010.asp
Demographics	
State Population Distributions for 1970-2004	Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database, National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2007. Website: http://seer.cancer.gov/seerstat/
State Population Distributions for 2005-2006	US Census Bureau Website: http://www.census.gov
Social Determinants of Health	
High School Graduation	Iowa Department of Education, Bureau of Planning, Research, Development, and Evaluation, Project EASIER Website: www.iowa.gov/educate
Poverty Levels	U.S. Census Bureau, Small Area Income & Poverty Estimates Website: http://www.census.gov/did/www/saie/
Uninsured	U.S. Census Bureau, Small Area Health Insurance Estimates Website: http://www.census.gov/did/www/sahie/
Health Behaviors	
Behavioral Risk Factor Surveillance System (BRFSS)	Centers for Disease Control & Prevention Website: http://www.cdc.gov/brfss/
Iowa Youth Survey (IYS)	Iowa Department of Public Health, Division of Health Promotion, Prevention, and Addictive Behaviors Website: http://www.state.ia.us/dhr/iys/
Substance Abuse Treatment	Iowa Consortium for Substance Abuse Research
Marriages	Iowa Department of Public Health Vital Statistics
Dissolutions	Website: http://www.idph.state.ia.us/apl/health_statistics.asp

Prenatal and Infant Health

Live Births	Iowa Department of Public Health, Vital Statistics, Birth Certificates Website:
Out-Of-Wedlock Births	http://www.idph.state.ia.us/apl/health_statistics.asp
Mothers Under Age 20	
Low Birth Weight	
Mothers Who Began Prenatal Care in the First Trimester	
Mothers Who Smoked During Pregnancy	
Mothers Who Drank During Pregnancy	
Fetal Deaths	Iowa Department of Public Health, Vital Statistics, Death Certificates Website:
Neonatal Deaths	http://www.idph.state.ia.us/apl/health_statistics.asp
Perinatal Deaths	
Infant Deaths	
Birth Defects	Iowa Center for Congenital and Inherited Disorders, The University of Iowa Website:
Selected Birth Defects in Iowa	http://www.idph.state.ia.us/genetics/default.asp

Infectious Diseases

Sexually Transmitted Diseases	Bureau of Disease Prevention and Immunization via Iowa Department of Public Health
Infectious Diseases	Bureau of Infectious Diseases via Iowa Department of Public Health

Cancer Incidence and Mortality

All Sites of Cancer	<i>All cancer incidence data from:</i>
Prostate	The University of Iowa, State Health Registry of Iowa via NCI's SEER*Stat Program, version 6.5.1. Website: http://seer.cancer.gov/seerstat/
Lung	
Female Breast	
Colorectum	<i>All cancer mortality data from:</i>
Non-Hodgkin's Lymphoma	"Cause of Death" codes on death certificates filed with Vital Records, Iowa Department of Public Health via NCHS and NCI's SEER*Stat Program, version 6.5.1.
Leukemia	Website: http://seer.cancer.gov/seerstat/
Skin Melanoma	
Oral Cavity (Excluding Lip)	
Cervical	

Injury Mortality

All Transportation
 Motor Vehicle Traffic
 Suicide
 Firearms
 Falls
 Homicide
 Poisoning
 Burns
 Drowning
 All Other Unintentional

“Cause of Death” codes on death certificates filed with Vital Records, Iowa Department of Public Health. Analyses conducted by The University of Iowa, State Health Registry of Iowa.

Youth Injury Mortality

All Transportation Ages 0-14
 All Transportation Ages 15-19
 Motor Vehicle Traffic Ages 0-14
 Motor Vehicle Traffic Ages 15-19
 Suicide Ages 0-14
 Suicide Ages 15-19
 Homicide Ages 0-14
 Homicide Ages 15-19

“Cause of Death” codes on death certificates filed with Vital Records, Iowa Department of Public Health. Analyses conducted by the University of Iowa, State Health Registry of Iowa.

Other Mortality

All Causes
 Heart Disease
 Stroke
 Chronic Obstructive Pulmonary Disease
 Pneumonia/Influenza
 Diabetes Mellitus
 Atherosclerosis
 Infectious/Parasitic
 Nephritis, Nephrotic Syndrome, Nephrosis
 Chronic Liver Disease and Cirrhosis
 Congenital Anomalies
 Conditions Originating in the Perinatal Period
 Alzheimer’s

“Cause of Death” codes on death certificates filed with Vital Records, Iowa Department of Public Health via NCHS and NCI’s SEER*Stat Program, version 6.5.1.
 Website: <http://seer.cancer.gov/seerstat/>

Health Care Providers

Total Physicians	Office of Statewide Clinical Education Programs (OSCEP), College of Medicine, The University of Iowa
Primary Care Physicians	
Family Practice Physicians	
Internal Medicine Physicians	
Pediatric Physicians	
Obstetrics/Gynecology Physicians	
General Surgeons	
Other Specialty Physicians	
Physician Assistants	
Advanced Practical Nurses	
Pharmacists	
Dentists	
Emergency Care Providers: Total	Bureau of Emergency Medical Services
First Responders	Iowa Department of Public Health
Emergency Medical Technicians: Basic	Website: http://www.idph.state.ia.us/ems/
Emergency Medical Technicians: Intermediate	
Emergency Medical Technicians: Paramedic	
Emergency Medical Technicians: Paramedic Specialist	

Health Care Facilities

Hospitals
 Hospital Beds
 Nursing Facilities
 Nursing Facility Beds
 Chronic Confusion or Dementing Illness Units
 Chronic Confusion or Dementing Illness Beds
 Intermediate Care Facilities for the Mentally Retarded
 Intermediate Care Facilities for the Mentally Retarded Beds
 Residential Care Facilities
 Residential Care Facilities Beds
 Residential Care Facilities for Persons with Mental Illness
 Residential Care Facilities for Persons with Mental Illness Beds
 Residential Care Facilities for the Mentally Retarded
 Residential Care Facilities for the Mentally Retarded Beds
 3 to 5 Bed Units for the Mentally Retarded
 3 to 5 Bed Units for the Mentally Retarded Beds
 Psychiatric Medical Institutions for Children
 Psychiatric Medical Institutions for Children Beds
 Total Trauma Facilities
 Community Trauma Care Facilities
 Area Trauma Care Facilities
 Regional Trauma Care Facilities
 Resource Trauma Care Facilities

Department of Inspections and Appeals Website
<http://www.state.ia.us/government/dia/page11.html>

Bureau of Emergency Medical Services
 Iowa Department of Public Health
 Website: <http://www.idph.state.ia.us/ems/>

Environmental Indicators

Childhood Lead Poisoning

Bureau of Lead Poisoning Prevention
 Iowa Department of Public Health

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Appendix II: Glossary of Terms

Glossary of Terms

Age-Adjusted Rate (Direct Method): A weighted average of the age-specific incidence or mortality rates from the targeted population(s) where the weights are the proportions of persons in the corresponding age groups of a standard population. In this document, the Year 2000 U.S. population is used as the standard population. Calculating an age-adjusted rate allows for comparisons across targeted populations after accounting or “adjusting” for possible differences in the age-distribution of these populations.

Area Trauma Care Facility: Provides initial evaluation and stabilization, including surgical intervention for the severely injured patient. An area trauma care facility provides comprehensive inpatient services to patients who can be maintained in a stable or improving condition without specialized care. Critically injured patients who require specialized care are transferred to a resource or regional trauma care facility. An organized trauma team including a general surgeon, emergency physician, CRNA and/or anesthesiologist, nursing and ancillary personnel are promptly available to meet the patient upon arrival at the emergency department. The general surgeon, emergency physician, and ancillary personnel may be on-call from outside the hospital but with a clear commitment to meet a patient upon arrival at the emergency department when given timely notice by out-of-hospital EMS providers. Some area trauma care facilities elect to provide in-house 24-hour emergency physician coverage. In addition to direct patient care, area trauma care facilities provide community and outreach education and injury prevention programs.

Chronic Confusion or Dementing Illness Units: “Chronic Confusion or Dementing Illness” is a special license classification for nursing facilities or a special unit within such a facility providing care to persons who suffer from chronic confusion or dementing illness. Reference to Chronic Confusion or Dementing Illness Units is made in the acts and joint resolutions of the 1990 regular session of the Seventy-Third General Assembly of the State of Iowa.

Community Trauma Care Facility: Provides initial evaluation and stabilization of the severely injured patient. Stabilization may include surgical intervention. Most patients needing surgical intervention and/or specialty care are transferred to resource or regional trauma care facilities. Community trauma care facilities have the necessary equipment and diagnostic resources to resuscitate the severely injured patient. An organized team including a physician, nursing and ancillary personnel are promptly available to meet the patient upon arrival at the emergency department if given timely notice by out-of-hospital EMS providers. In addition to patient care, a community trauma care facility provides continuing education and injury prevention programs.

Confidence Interval: An interval estimate of a population parameter, often for the mean, calculated from a sample. The width of the interval will increase as the level of confidence increases resulting in a less certain estimate. Narrow confidence intervals indicate a higher level of accuracy.

Crude Rate: The number of events or occurrences of disease in a given time period divided by the population at risk for that event or disease over the same time period.

Emergency Medical Technician – Basic: The EMT-B course emphasizes the development of student skills in patient assessment and examination; the recognition of signs and symptoms of illness or injury; proper procedures when rendering emergency medical care including patient assisted medications, automated external defibrillation, maintenance of a non-medicated IV, and the use of an advanced airway device. General topics covered include: human anatomy and physiology, bleeding and shock, bandaging and splinting, medical/behavior emergencies, obstetrics/gynecology, extrication from automobiles, farm, industrial and environmental emergencies, and ambulance operations.

Emergency Medical Technician – Intermediate: The EMT-I course involves additional training in patient assessment, intravenous therapy, advanced airway management techniques and automated defibrillation.

Emergency Medical Technician – Paramedic: This level covers additional emergency medical care skills including cardiac evaluation and treatment, medication effects and treatment, and advanced airway management techniques.

Emergency Medical Technician – Paramedic Specialist: This level identifies individuals who have successfully completed a program of training that used, as a minimum, the 1985 EMT-P national standard curriculum (NSC), plus documentation of completion of the objectives to the 1998 EMT-P NSC, or completed the 1998 EMT-P NSC and have successfully completed the department's testing requirements.

Fetal Death: A birth that fails to show any sign of life after delivery. Reportable fetal deaths in Iowa are those greater than 20 weeks gestation. The responsibility for determining if a birth meets this definition is that of the attending physician. "Fetal death" and "stillbirth" are synonymous terms.

First Responder: The First Responder is trained in patient stabilizing techniques and basic emergency medical care prior to the arrival of an ambulance. Skills in this program include patient assessment, vital signs, automated external defibrillation, oxygen delivery, and use of an advanced airway device.

Hospital: Any place which is devoted primarily to the maintenance of facilities for the diagnosis, treatment, or care of two or more non-related individuals suffering from illness, injury, or deformity for a period exceeding 24 hours. It is also a place which is devoted primarily to the rendering of obstetrical or other medical/nursing care for two or more non-related individuals for a period exceeding 24 hours. It can be any institution, place, building or agency in which any accommodation is primarily maintained, furnished or offered for the care of two or more non-related aged or infirmed person requiring or receiving chronic or convalescent care for a period exceeding 24 hours. Hospitals shall include sanitariums or other related institutions within the meaning of the federal Hill-Burton Act. A hospital shall include, in any event, any facilities wholly or partially constructed, or constructed with federal assistance pursuant to Public Law 725, 79th Congress, approved August 13, 1946. Definition is found in Title 42 in the Code of Federal Regulations and 135J of the Iowa Administrative Code.

Infant Death: Death of a liveborn infant under one year of age. This includes both neonatal and postneonatal deaths.

Intermediate Care Facilities for the Mentally Retarded: Institutions or distinct parts of institutions whose primary purpose is to provide health or rehabilitative services to three or more individuals who primarily have mental retardation or a related condition. Intermediate Care Facilities for the Mentally Retarded must meet the requirements of Iowa Code Chapter 135C and federal standards codified in 42 United States Code 1936d, which is contained in Title 42 of the Code of Federal Regulations, Part 483, Subpart D, 410-480. Definition is found in Chapter 135C of the Code of Iowa.

Intermediate Care Facilities for Persons with Mental Illness: Institutions, places, buildings or agencies whose primary purpose is to provide accommodation, board and nursing care for a period exceeding 24 consecutive hours to three or more individuals who primarily have mental illness. Definition is found in Chapter 135C of the Code of Iowa.

Live Birth: A birth that shows any sign of life after delivery. The World Health Organization considers a sign of life as being the breathing or showing of any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. The responsibility for determining if a birth meets this definition is that of the attending physician.

Margin of Error: Indicates the accuracy of an estimate and is half the width of a confidence interval. Small margins of error signify more accurate estimates.

Metropolitan Statistical Area (MSA): An area with one city of 50,000 or more inhabitants or a Census defined urbanized area and a total metropolitan population of at least 100,000 (75,000 in New England).

Neonatal Death: Death of a liveborn infant occurring within the first 27 days of life.

Nursing Facilities: Institutions or distinct parts of institutions housing three or more individuals for a period exceeding 24 consecutive hours, whose primary purpose is to provide health-related care and services, including rehabilitation, for individuals who because of mental or physical condition, require nursing care and other services in addition to room and board. Nursing facilities do not engage primarily in providing treatment or care for mental illness or mental retardation. Definition is found in Chapter 135C of the Code of Iowa.

Perinatal Death: Death of a fetus of greater than 20 weeks gestation or death of a liveborn infant under 28 days of life.

Primary Care Physicians: Includes Family Practice, Internal Medicine, Pediatric, and Obstetrics/Gynecology physicians.

Public Access Defibrillation: An EMS provider level for nontraditional providers of emergency medical care who have successfully completed a program that uses a curriculum that meets the approved Iowa objectives regarding Public Access Defibrillation and have successfully completed the department's testing requirements.

Residential Care Facilities: Institutions, places, buildings, or agencies providing accommodation, board, personal assistance and other essential daily living activities for a period exceeding 24 consecutive hours. Individuals living in a residential care facility are unable to sufficiently or properly care for themselves because of illness, disease, or physical or mental infirmity, but do not require the services of a registered or licensed practical nurse, except for emergencies. Definition is found in Chapter 135C of the Code of Iowa.

Residential Care and Specialized 3-5 Bed Facilities for the Mentally Retarded: Facilities that provide accommodations, board, personal assistance, essential activities of daily living and habilitation services to three or more individuals with mental retardation. Residents of a Residential Care Facility for the Mentally Retarded are unable to sufficiently or properly care for themselves, but do not require the services of a registered or licensed practical nurse. The specialized license is for Residential Care Facilities which serve persons with mental retardation, chronic mental illness and other developmental disabilities having five or fewer residents as specified in Iowa Code Section 225C.26. The facility is exempt from Iowa Code Section 135.63. Definition is found in Chapter 135C of the Code of Iowa.

Regional Trauma Care Facility: Provides comprehensive care for the severely injured patient with complex multisystem trauma. An organized trauma team including a general surgeon, emergency physician, anesthesiologist, nursing and ancillary personnel are immediately available to the patient upon arrival at the emergency department. The general surgeon and anesthesiologist are immediately available to the patient upon arrival at the emergency department. The general surgeon and anesthesiologist may take call from outside the hospital, but with a clear commitment to meet the patient upon arrival at the emergency department. A broad range of physician specialists are on-call and promptly available to provide care and/or consultation. In addition to direct patient care, regional trauma care facilities are responsible for community and outreach education and injury prevention.

Resource Trauma Care Facility: Provides the most comprehensive care for the severely injured patient with complex multisystem trauma. An organized trauma team including a general surgeon, emergency physician, anesthesiologist, nursing and ancillary personnel are immediately available to the patient upon arrival at the emergency department. Physician specialists may also respond immediately with the trauma team. A broad range of physician specialists are on-call and promptly available to provide care and/or consultation. In addition to direct patient care, resource trauma care facilities are responsible for resident training, research, community and outreach education and injury prevention.

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Appendix III: Coding and Classifications

Cancer Incidence and Mortality

Type of Cancer	Incidence	Mortality	
	ICD-O 3 ¹	ICD-9 ² (1979-1998)	ICD-10 ³ (1999-Current)
All Sites	C00.0-C80.9	140-208, 238.6	C00-C97
Cervical	C53.0-C53.9	180	C53
Colorectum	C18.0-C18.9, C19.9, C20.9, C26.0	153, 159.0, 154.0-154.1	C18, C26.0, C19-C20
Female Breast	C50.0-C50.9	174-175	C50
Leukemia	M9800-M9804, M9820-M9828, M9830, M9840-M9842, M9850, M9860-M9864, M9866-M9868, M9870-M9874, M9880, M9890-M9894, M9900, M9910, M9931-M9932, M9940-M941	202.4, 203.1, 204.0-204.2, 204.8-205.3, 205.8-206.2, 206.8-207.2, 207.8, 208.0-208.2, 208.8-208.9	C90.1, C91.0-C91.5, C91.7, C91.9-C92.5, C92.7, C92.9-C93.2, C93.7, C93.9-C94.5, C94.7, C95.0-C95.2, C95.7, C95.9
Lung & Bronchus	C34.0-C34.9	162.2-162.5, 162.8-162.9	C34
Non-Hodgkin's Lymphoma	M9590-M9595, M9670-M9677, M9680-M9688, M9690-M9698, M9700-M9717, M9823, M9827	200, 202.0-202.2, 202.8-202.9	C82-C85, C96.3
Oral Cavity (Excluding Lip)	C01.9-C02.9, C07.9-C08.9, C04.0-C04.9, C03.0-C03.9, C05.0-C05.9, C06.0-C06.9, C11.0-C11.9, C09.0-C09.9, C10.0-C10.9, C12.9, C13.0-C13.9, C14.0, C14.2-C14.8	141-149	C01-C14
Prostate	C61.9	185	C61
Skin Melanoma	C44.0-C44.9	172	C43

¹International Classification of Diseases for Oncology

²International Statistical Classification of Diseases and Related Health Problems, Ninth Revision

³International Statistical Classification of Diseases and Related Health Problems, Tenth Revision

Injury Mortality

Injury Mortality Classification	ICD-9 ² (1979-1998)	ICD-10 ³ (1999-2006)
Unintentional Poisoning	E850-E869	X40-X49
Unintentional Burn	E890-E899, E924	X00-X09, X10-X19
Unintentional Transportation	E800-E848, E929.0, E929.1	V01-V99, Y85
Motored Vehicle Traffic	E810-E819	V02-V04 (.1, .9), V09.2, V12-V14 (.3-.9), V19(.4-.6) V20-V28(.3-.9), V29(.4-.9) V30-V79(.4-.9), V80(.3-.5), V81.1, V82.1, V83-V86(.0-.3), V87(.0-.8), V89.2
Unintentional Drowning	E830, E832, E910	V90, V92, W65-W74
Firearm Mortality	E922, E955.0-E955.4, E965.0-E965.4, E970, E985.0-E985.4	W32-W34, X72-X74, X93-X95, Y35.0, Y22-Y24
Homicide and Legal Intervention Mortality	E960-E969, E970-E978	X85-Y09, Y87.1, Y35, Y89.0
Suicide Mortality	E950-E959	X60-X84, Y87.0
Deaths or Injuries from Falls	E880-E886.9, E888	W00-W19
All Other Unintentional Injury	E849, E870-E879, E887, E889, E900-E909, E911-E921, E923, E925-E928, E929.2-E929.9, E930-E949	W20-W31, W35-W45, W49-W60, W64, W75-W81, W83-W94, W99, X20-X39, X50-X54, X57-X59, Y40-Y66, Y69-Y84, Y86, Y88

²International Statistical Classification of Diseases and Related Health Problems, Ninth Revision

³International Statistical Classification of Diseases and Related Health Problems, Tenth Revision

Other Mortality

Mortality Classification	ICD-8 ⁴ (1968-1978)	ICD-9 ² (1979-1998)	ICD-10 ³ (1999-2006)
Heart Disease	390-398, 402, 404-429	390-398, 402, 404-429	I00-I09, I11, I13, I20-I51
Stroke	430-438	430-438	I60-I89
COPD	490-493	490-496	J40-J47
Pneumonia/Influenza	470-486	480-487	J10-J18
Diabetes	250	250	E10-E14
Infectious/Parasitic	001-089, 090-136	001-018, 020-088, 090-139	A00-A09, A15-A19, A20-A39, A40-A41, A42-A49, A50-A53, A54-B19, B20-B24, B25-B99
Chronic Liver Disease and Cirrhosis	571	571	K70, K73-K74
Diseases of Arteries, Arterioles, and Capillaries	440, 441, 442-448	440, 441, 442-448	I70-I78
Diseases of the Kidney and Ureter	580-584	580-589	N25-N27
Congenital Anomalies	740-759	740-759	Q00-Q99
Certain Conditions Originating in the Perinatal Period	760-779	760-779	P00-P96

²International Statistical Classification of Diseases and Related Health Problems, Ninth Revision

³International Statistical Classification of Diseases and Related Health Problems, Tenth Revision

⁴International Statistical Classification of Diseases and Related Health Problems, Eighth Revision

Appendix IV: Iowa Health Data Information Resources

Iowa Health Data Information Resources

ADULT BLOOD LEAD EPIDEMIOLOGY AND SURVEILLANCE: LEAD POISONING PREVENTION PROGRAM: Rita Gergely, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6340. Fax: (515) 281-4529. E-mail: rgergely@idph.state.ia.us.

ANNUAL REPORT OF PUBLIC HEALTH NURSING ACTIVITIES: Judy Naber, Center for Public Health Services and Health Improvement, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7016. Fax: (515) 242-6384. E-mail: jnaber@idph.state.ia.us.

BACKFLOW ASSEMBLY TESTER REGISTRATION: Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: mmagnant@idph.state.ia.us.

BARRIERS TO PRENATAL CARE SURVEY: Mary Losch, PhD., Center for Social and Behavioral Research, University of Northern Iowa, Cedar Falls, IA 50614. Phone: 319-273-2105 Email: mary.losch@uni.edu.

BEHAVIOR RISK FACTOR SURVEILLANCE SYSTEM (BRFSS): Donald Shepherd (BRFSS Coordinator), State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7132. Fax: (515) 281-6475. E-mail: dshepherd@idph.state.ia.us.

BIRTHS: Diane Boden, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6542. Fax: (515) 281-0479. E-mail: dboden@idph.state.ia.us. Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6762. Fax: (515) 281-0479. E-mail: jfrance@idph.state.ia.us.

BOARD DISCIPLINARY ORDERS: Constance L. Price, Executive Director, Board of Dental Examiners, 400 SW 8th Street, Des Moines, IA 50309. Phone (515) 281-5157. Fax: (515) 281-7969. E-mail: ibde@iowa.gov.

BOARD OF MEDICAL EXAMINERS ANNUAL REPORTS: Mark Bowden, Iowa State Board of Medical Examiners, Iowa Dept. of Public Health, 400 SW 8th Street, Suite C, Des Moines, IA 50309. Phone: (515) 242-3268. Fax: (515) 242-5908. E-mail: mark.bowden@iowa.gov.

CANCER INFORMATION SERVICE: Contact Joan Felkner, University of Iowa for more details. E-mail: joan-felkner@uiowa.edu.

CARDIOVASCULAR SCREENING PROGRAM DATA: Arlene Johnson, Division of Health Promotion, Prevention and Addictive Behaviors, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7097. Fax: (515) 281-4535. E-mail: ajohnson@idph.state.ia.us.

CENTER FOR HEALTH EFFECTS OF ENVIRONMENTAL CONTAMINATION (CHEEC) Data Management Center (CDMC): Pete Weyer, Center for Health Effects of Environmental Contamination, The University of Iowa, 100 Oakdale Campus N203 OH, Iowa City, IA 52242. Phone: (319) 335-4550. Fax: (319) 335-4747. E-mail: cheec@uiowa.edu.

CENTRAL REGISTRY FOR BRAIN AND SPINAL CORD INJURIES: Terry Smith Bureau of Information Management, Iowa Dept. of Public Health, 401 SW 7th Street, Suite D, Des Moines, IA 50309. Phone: (515) 242-6075. Fax: (515) 725-0318. E-mail: tsmith@idph.stat.ia.us.

CERTIFIED OUTPATIENT AND DIABETES EDUCATION PROGRAMS, SUMMARY DATA: Melissa Winter, Diabetes Control Program, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6204. Fax: (515) 281-4535. E-mail: mwinter@idph.state.ia.us.

CHILD AND FAMILY HOUSEHOLD HEALTH SURVEY: Lucia Dhooge, Bureau of Family Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7613. Fax: (515) 242-6013. E-mail: ldhooge@idph.state.ia.us.

CHILD HEALTH DATA SYSTEM – CHILD & ADOLESCENT REPORTING SYSTEM (CAREs): Marcus Johnson, Bureau of Family Health, Iowa Dept. of Public Health, 321 E. 12th Street, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6284. Fax: (515) 242-6013. E-mail: mjohnson@idph.state.ia.us.

CHILDHOOD LEAD POISONING PROGRAM: Rita Gergely, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6340. Fax: (515) 281-4529. E-mail: rgergely@idph.state.ia.us.

DAY CARE/HEAD START IMMUNIZATION LEVELS: Tina Patterson, Immunization Bureau, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7053. Fax: (800) 831-6292. E-mail: tpatters@idph.state.ia.us.

DEATHS: Diane Boden, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6542. Fax: (515) 281-0479. E-mail: dboden@idph.state.ia.us. Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6762. Fax: (515) 281-0479. E-mail: jfrance@idph.state.ia.us.

DENTAL HEALTH CENTER DATA REPORT: Bob Russell, Bureau of Oral Health, Division of Health Promotion & Chronic Disease Prevention, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4916. Fax: (515) 242-6384. E-mail: brussell@idph.state.ia.us.

DENTISTS, DENTAL HYGIENISTS, DENTAL ASSISTANTS: Constance L. Price, Executive Director, Board of Dental Examiners, 400 SW 8th Street, Des Moines, IA 50309. Phone: (515) 281-5157. Fax: (515) 281-7969. E-mail: ibde@iowa.gov.

DIVORCES: Diane Boden, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6542. Fax: (515) 281-0479. E-mail: dboden@idph.state.ia.us. Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6762. Fax: (515) 281-0479. E-mail: jfrance@idph.state.ia.us.

EMERGENCY MEDICAL SERVICES CERTIFICATION DATABASE: Joe Ferrell, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 321 E. 12th Street, Des Moines, IA 50319-0075. Phone: (515) 725-0319. Fax: (515) 725-0318. E-mail: jferrell@idph.state.ia.us.

EMERGENCY MEDICAL SERVICES SERVICE DATABASE: Kirk Schmitt, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 321 E. 12th Street, Des Moines, IA 50319-0075. Phone: (515) 281-0437. Fax: (515) 725-0318. E-mail: kschmitt@idph.state.ia.us.

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